APR 8
McCARTNEY LIBRARY
GENEVA COLLEGE

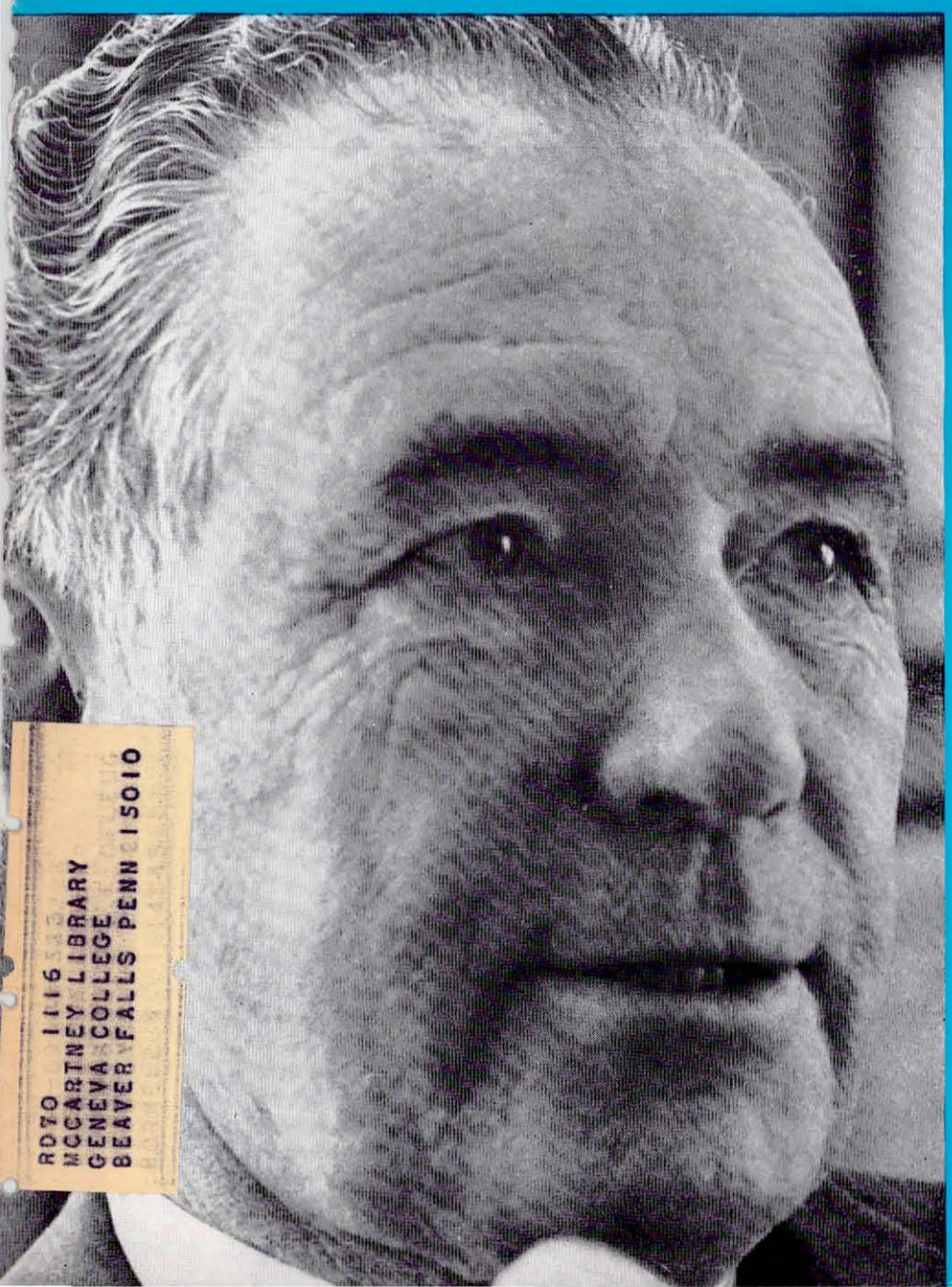
FREIGHT TRAFFIC SPECIAL REPORT ON L&D PREVENTION

March 31, 1969

RAILWAY AGE

THE TRANSPORTATION WEEKLY

AAR's TOM GOODFELLOW TALKS ABOUT



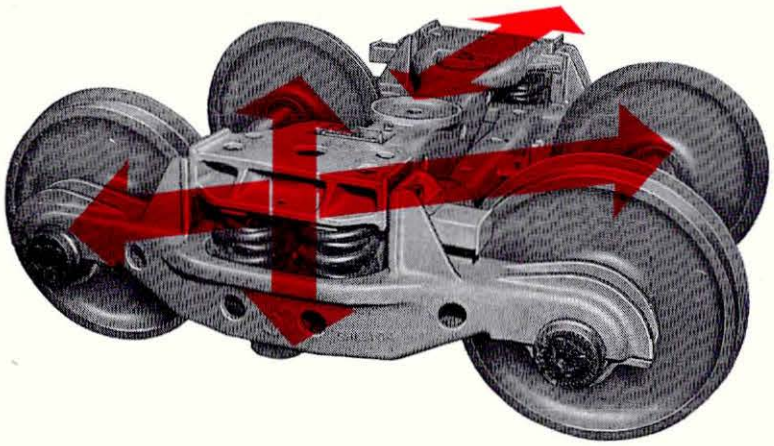
a new research effort for the railroads

RD70 1116
MCCARTNEY LIBRARY
GENEVA COLLEGE
BEAVER FALLS PENN 15010

not one...not two

but three-dimensional cushioning

in the Rockwell Express Truck



are your cars cushioned vertically and laterally?

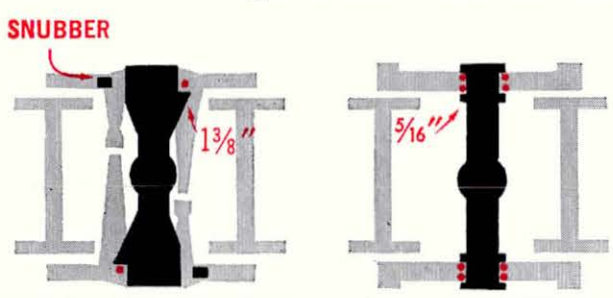
Significant reductions in damage to lading and equipment have been achieved by the use of cushioning devices in freight cars. However, these devices cushion only in the longitudinal direction. Damage *also* occurs because of vertical and lateral forces. Conventional freight car trucks provide little or no cushioning against vertical and lateral forces.

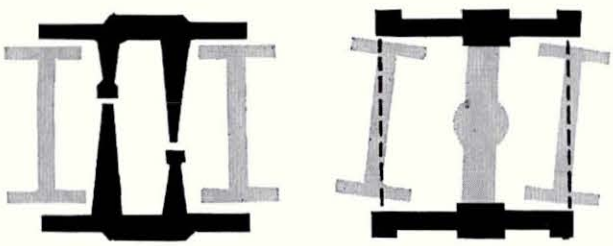
The Rockwell Express truck is designed to protect your equipment and your lading by providing:

1. A SOFTER, EQUALIZED VERTICAL RIDE. Diagonally-spaced spherical bearings in the transoms permit individual vertical displacements of each wheel with a minimum of wheel load transfer. Bolster springs are designed to provide a softer ride under all load conditions for the specific application involved. Vertical displacements and motions are controlled by a guided, spring-loaded, asbestos-phenolic snubber.

2. AN EXCELLENT LATERAL RIDE. The suspension design permits 1⅜" lateral displacement – *four times* that of the conventional freight car truck – with fewer wear points. The bolster spring design and snubbing arrangement converts this displacement into an easy, controlled lateral ride. Higher, wider spring location reduces sway and roll. Journal bearing design provides additional lateral, as well as vertical, cushioning.

3. RIGID TRAM. The ability of a truck to stay in tram significantly affects the ride and lading protection it provides. The unique Rockwell design features transoms integrally cast in side frames to form a rigid, horizontal frame, preventing the truck from skewing. This also reduces wear, which maintains ride qualities throughout the life of the truck. An important side benefit of this feature is the reduction in wheel wear.





Your premium car equipment and fragile lading deserve the three-dimensional cushioning of the Rockwell Express truck.

A TRIAL CAN GIVE YOU EVIDENCE of the superior performance of the Rockwell Express truck. Arrangements for a trial carset can be easily made. Just call or write for details.

RPI Member

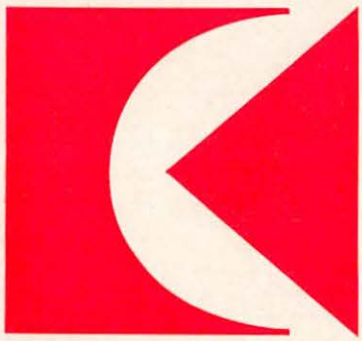
Rockwell
MANUFACTURING COMPANY

10760

LFM-Atchison Division / Atchison, Kansas 66002 / Phone: (913) 367-2121

Circle 1 on coupon page 69

Another 51 MLW-Worthington locomotives to carry new logo

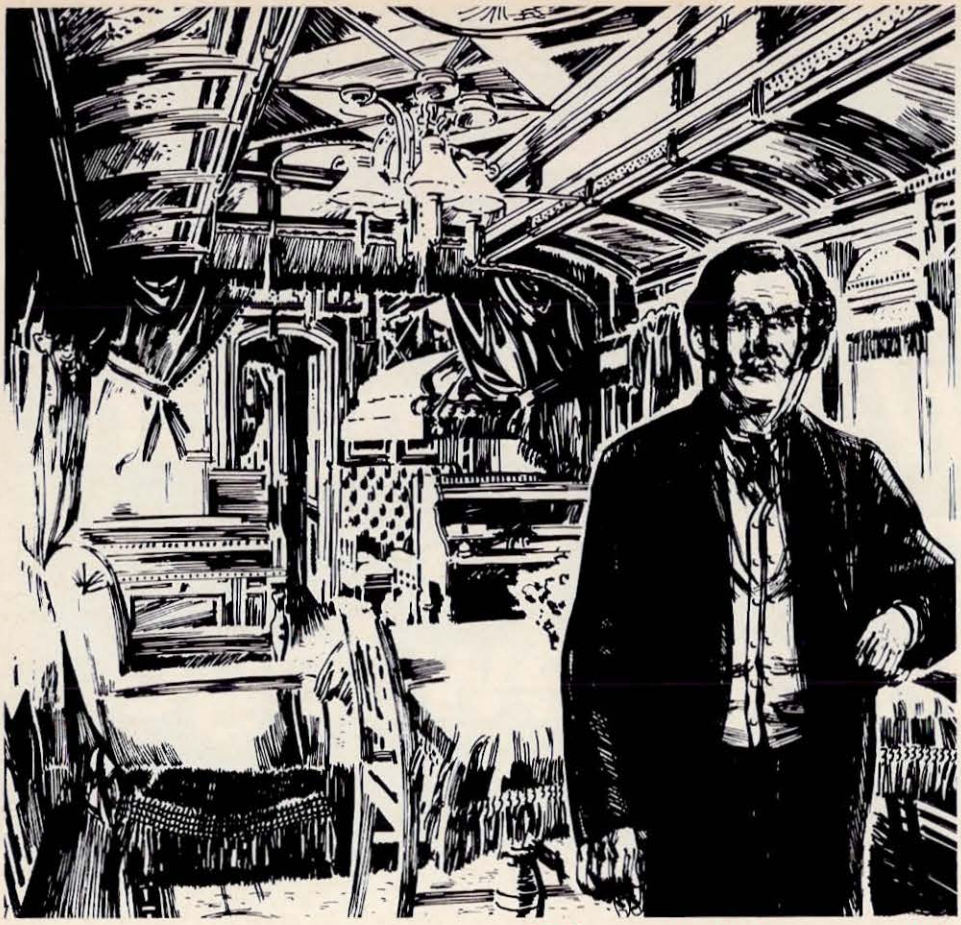


CP Rail

MLW-Worthington Limited

1505 Dickson Street — Montreal, Canada

Circle 37 on coupon page 69



FreightMaster's
HISTORY
In the Making

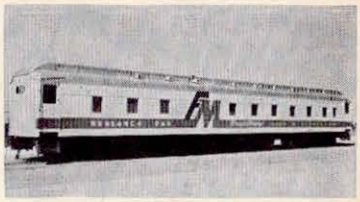
For all their wealth in the 1890's, the industrial barons couldn't enjoy FreightMaster cushioning.

The opulent private railcars created in the late 1800's symbolized the nation's most luxurious method of transportation. The cars incorporated every known comfort, but they still lacked the superior cushioning concept that's found on thousands of today's boxcars.

It's too bad that FreightMaster's extra efficient end-of-car hydraulic cushioning equipment wasn't available. The luxury private cars that crowned this golden era of railroad history could have used our velvet-like cushioning to protect both the cars and their cargo of plush living quarters.

Today, records show that it doesn't cost in the long run to add FreightMaster protection – it pays dividends to the shipper and the railroad. Dividends like reduced damage claims for even the most fragile freight and less possibility of damage to the car structure.

Contact FreightMaster the next time you're considering cushioning systems for a car program. And make a little history yourself.



OUR PRIVATE CAR isn't quite as plush as those created in the last century, but it logs a lot of miles annually as one of the industry's most outstanding mobile research laboratories. Finding better ways to protect cargo and car structures – with modern research equipment like this – is our way of doing the job right.

FreightMaster®
A DIVISION OF HALLIBURTON SERVICES

NEW CONCEPTS OF INCREASED PROTECTION FOR CARS AND CARGO THROUGH RESEARCH

MEMBER RPI

AID

*Servicemark

424 W. Vickery Boulevard • Fort Worth, Texas 76101 • Canada: Hawker Siddeley Canada Ltd., Montreal • Mexico: Materiales y Servicios Ferroviarios, S. A., Marconi Numero 2–37, Mexico 1, D.F.

11
FreightMaster is ~~10~~ years ahead.

Circle 5 on coupon page 69

RAILWAY AGE

March 31, 1969 • Vol. 166, No. 11

THIS WEEK

30 A new research effort for the railroads
AAR President Goodfellow describes the industry's goals.

33 The anti-L&D battle continues
It's being waged by shippers, equipment makers and railroads.

47 White paint cuts pipe damage
Painted interiors make it easier to see car bottoms and sides.

48 Connector may solve long-car problems
Articulating device permits cars to have two, three or more units.

50 Shippers split on passenger-train aid
Industrial traffic managers discuss the pro and cons.

84 Viewpoint: Say something, Mr. Volpe. . .
Does the DOT chief think railroads don't matter any more?

DEPARTMENTS

74	As the Editor Sees It	56	People in the News
77	Freight Carloadings	7	Short and Significant
76	Industrial Traffic	72	Supply Trade
54	Letters from Readers	50	Traffic Poll
12	Lines on Labor	84	Viewpoint
8	Monday Morning Report	29	Watching Washington
77	New Equipment	11	Week at a Glance
69	New Products Report	80	You Ought to Know

. . . AND COMING NEXT WEEK

TRANSIT: The changing of the guard in Washington. A special report by Transit Editor Joe Asher on the prospects for meaningful action at the federal level. Also: The DRPA success story.

Editorial and Executive Offices
New York, N.Y. 10007, 30 Church St.

ROBERT G. LEWIS: Publisher
LUTHER S. MILLER: Editor
FRED C. MILES: Executive Editor

Transit Editor: Joseph Asher
Mechanical: F. N. Houser
Car & Locomotive Cyclopedia:
C. L. Combes
Art Director: Joel Petrower
Art Editor: Maurice H. Mates
Art Assistant: Thomas J. Pendergast
Editorial Assistant: June Meyer
Market Research: Robert N. Paltos
Librarian: Edith C. Stone
Production Manager: Fred B. Hecht
Manager—Contract Department:
Constance Nicolai

Editorial and Executive Offices
Chicago, Ill. 60604, 14 E. Jackson Blvd.

C. JAMES FISHER: Vice President—Sales
GUS WELTY: Senior Editor
Mechanical: Robert D. Bartley
Engineering:
M. H. Dick R. E. Dove
Signaling & Communications:
Robert W. McKnight
Editorial Assistant: Wanda Brown

Washington, D.C. 20004,
National Press Bldg.
Washington Editor: Frank Malone

London, W.C. 2, England, 4, Talbot House; 98 St. Martin's Lane
International Editor:
John Levett

Contributing Editors:
Norman E. Gillespie
3205 Chelsea
Orlando, Florida 32803

Charles Layng
6019 Nashua St.
Orlando, Florida 32809

E. L. Woodward
876 Chattanooga Ave.
Pacific Palisades, Calif. 90272

GEORGE DUSENBURY: Editorial Director

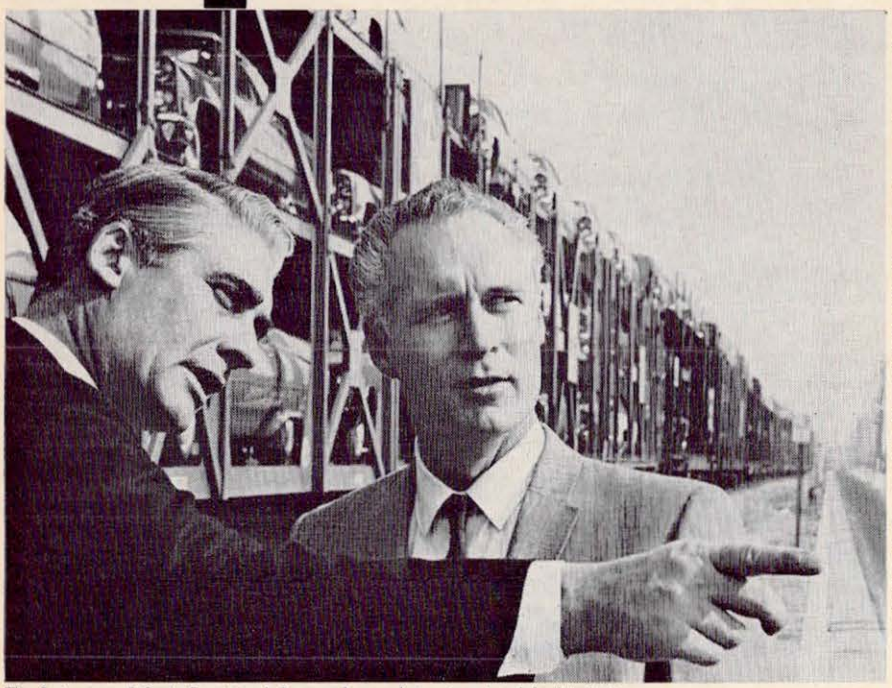
FOR LIST OF SALES OFFICES SEE ADVERTISING INDEX PAGE

Member of ABC RPI

Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.
Published weekly (except for four issues combining two-in-one) by the Simmons-Boardman Publishing Corporation, 508 Birch St., Bristol, Conn. 06010.
Railroad employees' subscription rate, U.S. possessions, Canada and Mexico, $6 one year, $9 two years, all others $15 for one year, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. Single copies 60¢ except special issues.
Address all subscriptions, change of address and correspondence concerning them to Subscription Dept., Railway Age, P.O. Box 961, Bristol, Conn. 06010.
Change of address should reach us three weeks in advance of next issue date. Send old address with new enclosing, if possible, your address label. Post Office will not forward copies unless you provide extra postage.

Circulation Dept.: John Rogers Director of Circulation, 30 Church St., New York, N.Y. 10007. POSTMASTER—SEND FORM 3579 TO P.O. Box 961, BRISTOL, CONN. 06010.
Printed at the Hughes Printing Co., 34 North Crystal St., East Stroudsburg, Pa. 18301. Second-class postage paid at Bristol, Conn., and at additional mailing offices.

R&D to help you helps us.



The Autoveyor. A Santa Fe original. It caused a revolution in automobile distribution.

That's why we work harder to make your ideas work.

Research and development is an integral part in every modern business system. At Santa Fe we have a staff of specialists in marketing and technical research, traffic and cost analysis, operations, engineering and industrial development, all working closely with their counterparts at our customers.

This teamwork develops better ways to apply transportation to the planning of your new products. It means more efficient distribution methods. New ideas for pricing freight movement. And opens new areas for plant site locations.

In other areas of R & D, Santa Fe is expanding a microwave network for super-fast communications. Third generation computers are updating procedure programs. Terminal facilities are being automated. Simulated programs are testing more effective use of diesel power and faster schedules. Freight cars are being built to larger size, for special cargoes.

Our truck fleet is being more closely coordinated to provide expanded service by highway and rail for Piggy-Back and Container shipments.

One of our new pipeline installations is now in operation and another is under construction.

Research and development that helps you, makes Santa Fe a better transportation system. What better reason could you have to be assured that we go all out to make your R & D ideas successful.

Below you'll see a few of the innovative ways R & D is working on the Santa Fe.

Santa Fe and its subsidiary companies continue a multimillion dollar improvement program with $190-Million capital expenditure for 1969.

This program includes: 2600 new freight cars; 90 road freight diesels, 25 remote locomotive control units, 1200 trailers for Piggy-Back and 100 chassis for containers, 417 more miles of welded rail and a new 31 mile spur track to serve recently discovered sulphur deposits in West Texas.

Millions are being invested in terminal improvement at Kansas City, which includes a new automatic freight classification yard to be completed and placed in service during 1969.

Further expansion will be made in diesel shops, new Piggy-Back and freight terminals in Texas and California, also new automobile handling facilities at Chicago.

Our 1969 expenditure program includes $39-Million for completion of the 2,000-mile Gulf Central pipeline scheduled to start operation in mid-summer of 1969, transporting anhydrous ammonia from Louisiana to Corn Belt states.

Additional land purchases for industrial development are planned at a number of points on the Santa Fe.

All of this program keeps Santa Fe up-to-date as a more efficient transportation system and contributes to our plans for researching and developing ideas to better serve our customers.

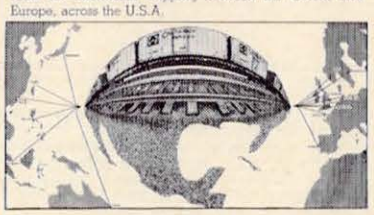
John S. Reed
President and Chief Executive Officer
Santa Fe Railway

Santa Fe

Please don't think of us as just another railroad...
Santa Fe is the moving part of your marketing arm.

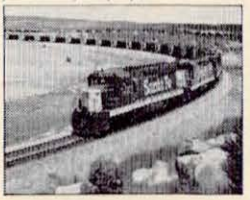
Super C. The world's fastest freight train takes 40 superquick hours to move Piggy-Back and Container freight between Chicago, Kansas City and Southern California. With 99% on-time performance, since it began early in 1968.

The Land Bridge. Santa Fe designs the fastest, most direct route for intermodal shipping between the Orient and Europe, across the U.S.A.



The Blizzard Box. A deep freeze on wheels. It carries perishables by rail, highway and ship to and from overseas points.

The Unit Train. Santa Fe's York Canyon Special. A 100-car train, moving coal to a Southern California steel plant on a precision schedule. (And we're working on a similar operation for a Texas sulphur mining company.)



The Astro Box. This important R & D project moves giant airplane sections between assembly plants.

Santa Fe's Passenger Fleet for Western Travel • Chicago-Los Angeles—SUPER CHIEF—EL CAPITAN • Chicago-San Francisco—SAN FRANCISCO CHIEF • Chicago-Houston—TEXAS CHIEF

Circle 6 on coupon page 69

SHORT AND SIGNIFICANT

IC's "Hustler": Premium price, only when earned

Illinois Central is taking a crack at the air-freight market, with a new container operation that carries a premium rate only if the service also qualifies as premium. Container equipment—IC-furnished Flexi-Vans—will be moved in the consist of the "Panama Limited" between Chicago and New Orleans. Containers received at either point by 4 p.m. are to be available at destination by noon of the following day. But if IC doesn't make the promised delivery, then the premium rate starts dropping. At the highest rate—for pre-noon delivery—the premium amounts to about 60%. For delivery between noon and 4 p.m., it drops to 35%. And it's wiped out if delivery comes after 4 p.m. "Hustler" service is the first development to come out of the new IC Intermodal Services Department, headed by Vice President Paul H. Reistrup. It's aimed at testing the degree to which the air-freight market can be penetrated by a rail service which comes within a couple of hours of matching air-carrier capability. Announcement of the operation March 4 brought no immediate bandwagon rush from switching shippers. But, IC says, there has been quite a bit of interest expressed—including, not surprisingly, calls from curious airline people.

LIRR seeks bigger slice of freight pie

The Long Island will have to go out of the freight business unless it gets a larger share of freight revenues, the railroad told the ICC last week. A petition to the Commission called the present division of rates "unjust, unreasonable and inequitable," and asked that the Commission launch an investigation. The petition claims that freight service accounted for more than $6 million of the road's total 1967 operating deficit of $10.9 million.

Test track will have eight types of construction

The types of track-supporting structure to be included in the main-line test track planned jointly by the Santa Fe and DOT's Office of High-Speed Ground Transportation (RA, Sept. 9, 1968, p. 11) have now been pretty well determined. R. H. Beeder, Santa Fe chief engineer, told the Maintenance of Way Club of Chicago that the intention was to have eight different types of construction, each about 1,000 feet long. These will include both continuous and discontinuous reinforced concrete slabs, both continuous and discontinuous reinforced concrete beams, conventional track in which the ballast has been stabilized with a polymer material, and "several other likely looking candidates." One or more types of concrete ties are being considered along with an asphalt slab under conventional track. Site selection has been narrowed down to two locations, one about 40 miles northeast of Wichita, Kans., and the other in eastern New Mexico. The track will be installed this year.

UP sets up train-control task force

Union Pacific is creating a new management section — Schedule Control — to monitor all train movements, around the clock, and to provide capability for "fast-action decisions . . . to guarantee on-time delivery of critical freight." Through this new section, UP will be exchanging train-operation data with other railroads to aid in expediting inter-road through-train movement. Heading the section will be K. A. Leger as superintendent of transportation-schedule control.

Ore train hauls 1,000,000 tons during first year

Canada's first unit train designed especially for pelletized iron ore completed its first year of operation March 20 with the delivery of the 1,000,000th ton of ore pellets at Dofasco's steel plant, Hamilton, Ont. The ore is hauled from Temagami, 340 miles north of Hamilton. The 30-ft. cylindrical hopper cars, each carrying 100 tons of pellets, are owned by Canadian National and the Ontario Northland. They operate in three 35-car train sets which run on a 72-hour load-to-load schedule. Rates drop substantially as volume rises above 750,000 tons.

MONDAY MORNING REPORT

PENN CENTRAL LOSES AN ARGUMENT

In recommending the Norfolk & Western-Chesapeake & Ohio merger, Edward L. Boisseree, Interstate Commerce Commission examiner, says the East has room for only two rail systems. Not three, not even two after experimenting with three, as Penn Central argues. Two right now, contends the examiner, because the public interest demands it. Penn Central may have little time left in which to argue, because the Justice Department already seems pacified. For Justice, all the new Norfolk & Western must do is to continue service on any of its Dereco-subsidiary lines—Delaware & Hudson, Erie Lackawanna, and eventually Reading, Boston & Maine and Central of New Jersey—that may founder; provide non-discriminatory service to and from Maine; and sever its lines west of the Mississippi River, if that becomes necessary to preserve a competitive balance.

PC GEOGRAPHY NEEDS COUNTERING

The five small lines need inclusion in N&W to survive, Boisseree says, and N&W needs the small lines, along with C&O, Baltimore & Ohio and Western Maryland, to survive the weight that PC throws around. "The consummation of Penn Central resulted in a railroad system of such geographic proportions that meaningful railroad competition from other presently constituted rail systems is not possible," Boisseree says.

PC HAS BALANCE, ONE-LINE STRENGTH

From its great geography, Penn Central gets balanced traffic, while N&W and C&O traffic has a coal bulge—the only area where Boisseree admits the two roads could compete strongly with PC as separate systems. Also, PC can give a single-line service that wipes out interchange time. An obvious advantage now, it would continue: "For the foreseeable future . . . the separate corporate status of the embraced railroads would preclude the establishment of single-line service comparable to that of Penn Central."

PC HAS REACH AND RATE POWER

Another PC strength, the examiner says, is a reach to 118 of the East's 158 cities with populations of more than 50,000. N&W and C&O each reach 78 of these cities. But from any of the cities served by both PC and either N&W or C&O, PC offers a single-line service to 117 others. The N&W-C&O matching of PC's reach would mean "all large eastern communities would continue to have a choice." PC was approved despite the fact that four large communities lost their choice, Boisseree adds. And because PC serves the most origins and destinations, it controls rate patterns and outdraws the others in industrial development. Finally, Boisseree contends that earlier Commission decisions leading to the present three-system Eastern structure do not constitute a "foreclosure" on further merger applications.

What does the "TOTAL DESIGN CONCEPT" of the BARBER STABILIZED TRUCK *REALLY MEAN?*

IT MEANS

MONEY SAVING PERFORMANCE!

The Barber Stabilized Truck gives greater lading protection, longer service life, lower maintenance . . . significant savings in time and money in every area of performance.
It's lower in first cost, too!

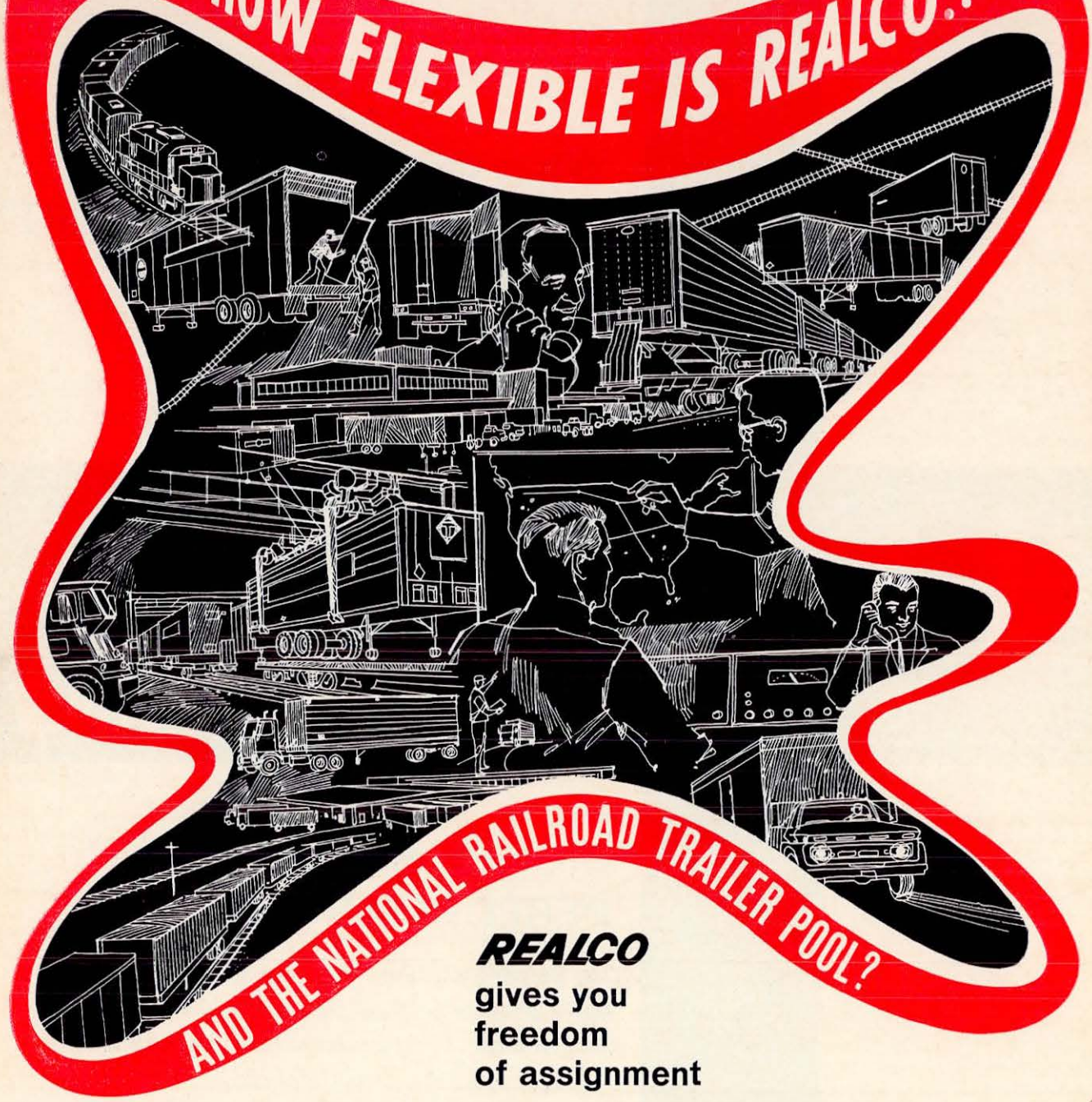
"Talk to the Man from Barber"

BARBER
STANDARD
CAR TRUCK COMPANY
CHICAGO • PHILADELPHIA • MONTREAL

3544

Circle 7 on coupon page 69

HOW FLEXIBLE IS REALCO...



AND THE NATIONAL RAILROAD TRAILER POOL?

REALCO gives you freedom of assignment

Because we are completely flexible in the supply, assignment and interchange of piggyback equipment, Members enjoy unusual *freedom* of assignment under a variety of programs.

FOR MEMBERS OF THE POOL, REALCO HAS THE FLEXIBILITY TO SERVE LOCAL NEEDS AS WELL AS MEETING INTERCHANGE REQUIREMENTS . . . WHILE *CONTINUING* TO EXTEND SERVICES TO THE EQUIPMENT WHEN IN POSSESSION OF CONNECTING LINES.

Ask your REALCO Regional Manager about the advantages of obtaining equipment from The National Railroad Trailer Pool!

REALCO®

Serving THE NATIONAL RAILROAD TRAILER POOL

REGIONAL OFFICES:
ATLANTA 30309, 1409 PEACHTREE ST., N.E., (404) 892-7454
CHICAGO 60606, 222 W. ADAMS ST., (312) 332-5567
NEW YORK 10017, 219 E. 42ND ST., (212) 557-8863
SAN FRANCISCO 94105, 681 MARKET ST., (415) 391-7523
HEADQUARTERS:
CHICAGO 60607, 433 W. HARRISON ST.

A Subsidiary of ICS Industries

Circle 8 on coupon page 69

WEEK AT A GLANCE

Court upholds full picketing by FEC strikers

State courts must allow full, not just partial, picketing of the Jacksonville terminal by Florida East Coast operating unions, the Supreme Court said last week. That ruling was aimed at a Florida State Circuit Court injunction (upheld by the State Supreme Court) that limited picketing to one gate of the terminal. In addition to picketing FEC directly, striking workers had attempted to block interchange with FEC by the terminal's other users, Southern and Seaboard Coast Line. Justice John M. Harlan wrote the 4-to-3 opinion which he said would preserve rail workers' rights to strike peacefully after Railway Labor Act procedures are exhausted, even if a secondary boycott is involved. Until Congress drafts a clear guide on what to do after federal routes fail, federal and state courts cannot interfere, Harlan said. Among the dissenters, Justice William O. Douglas said states should have the right to prevent a secondary boycott "which threatens to perilize the community" and the rights to govern such matters until Congress clarifies the issue.

Penn Central makes third Metroliner an express train

A third Metroliner train, operating nonstop between New York and Washington, will go into service this week. The new Metroliner will operate on a 2½-hour schedule, making it, according to Penn Central President Alfred E. Perlman, "the fastest land transportation in the country."

The two Metroliners placed in servict earlier this year operate on a three-hour schedule, making five stops.

The express train will depart from New York at 7:10 a.m., Monday through Friday, and arrive at Washington at 9:40. It will leave Washington at 4:30 p.m. and arrive at New York at 7.

Railroad capital spending now estimated at $1.73 billion

Railroad capital spending in 1969 will be an impressive 29.7% higher than in 1968, according to a late survey conducted by the Department of Commerce and the Securities and Exchange Commission. The survey sees railroad spending rising from an actual $1.34 billion in 1968 to a projected $1.73 billion in 1969—the biggest percentage increase of any industry group covered. For industry as a whole, expenditures are expected to rise by 13.9%. For transportation other than rail, an average increase of 12% is predicted. If the $1.73-billion figure is achieved, it will be the second highest in railroad history, topped only by the $1.95 billion of 1966. Railroad spending in 1967 was $1.53 billion. Heaviest spending this year, the survey says, will come in the second half with $970 million due to be invested by railroads. First-half expenditures are estimated at $760 million.

PROJECTED EXPENDITURES, ALL INDUSTRIES

	Billions of dollars			Percent Change	
	Actual 1967	Actual 1968	Anticipated 1969	1967 to 1968	1968 to 1969
All industries	61.66	64.08	72.96	3.9	13.9
Manufacturing	26.69	26.44	30.65	— .9	15.9
Durable goods	13.70	13.51	15.48	— 1.4	14.6
Nondurable goods	13.00	12.93	15.17	— .5	17.3
Mining	1.42	1.42	1.60	— .6	12.9
Railroad	**1.53**	**1.34**	**1.73**	**—13.0**	**29.7**
Transportation other than rail	3.88	4.31	4.83	11.3	12.0
Public utilities	9.88	11.54	13.16	16.7	14.1
Communications, commercial and other	18.25	19.04	21.00	4.3	10.3

GUS WELTY

LINES ON LABOR

IF YOU READ ENOUGH union literature, you come to the conclusion that railroads are run by a bunch of bumblers . . . that railroad service would get better overnight if only somebody other than the current generation of managers were running the show . . . that union-type folks would do a better job of it all if only somebody would listen to their ideas about how railroads ought to be run.

ALL OF THIS is harmless enough, up to the point where the propagandists start believing their own stuff. Then it begins to get a bit sticky. One wonders, idly, just what would happen if—by some quirk of fate or otherwise—those union-type folks were suddenly thrust into top railroad management, with not just the authority but also the responsibility for decision-making.

UNION TAKEOVERS of managerial prerogatives, however, are not unknown, in this crazy business of railroading. And maybe it wouldn't be quite so painful—*if* the takeover involved any measure of responsibility. Sad to say, though, takeover-minded union folks seldom seem interested in responsibility. Their interest is authority.

FOR A CURRENT case-in-point, consider the Burlington—faced with what's described as a unique demand from the shopcraft unions which would "make all work-contracting subject to union approval," which would "require the Burlington to manufacture equipment and repair parts," and which would forbid the railroad "to purchase such equipment or parts unless the unions approved such transaction."

NEEDLESS TO SAY, Burlington has resisted the shopcrafts. Giving in to this kind of veto-demand, the Q says, "would transfer management's function to the unions. The responsibility for providing safe and efficient transportation service would become a casualty, because management, stripped of its authority to manage, cannot perform in a responsible manner."

WITHOUT A DOUBT, there are areas in which unions have a legitimate interest. Wages and benefits and working conditions—including safety and work burden—are items on which union leadership is fully entitled to its position. But work-contracting? In this area, what legitimate interest can a union have? Burlington's experience seems to indicate that the shopcrafts' interest is almost wholly in preserving jobs. And when *that* becomes a "legitimate interest," then management might as well turn everything over to labor.

ORC&B, carriers agree on wages

Now there is one—one union still on the outside, in the "current" round of rail-union wage negotiations which actually began well over a year ago. The Order of Railway Conductors & Brakemen, like the Brotherhood of Locomotive Engineers (RA, March 17/24, p. 12), settled generally along lines of an emergency-board report. Terms included a 5% wage boost retroactive to July 1, 1968; 2% retroactive to Jan. 1, 1969; 3% effective July 1, 1969; and a special adjustment for conductors effective July 1 of this year. The ORC&B settlement leaves only the dispute involving the Brotherhood of Railroad Signalmen unresolved—in addition, of course, to the new wage case involving the six shopcraft unions whose demands followed a different timetable.

New Jersey will buy 76 cars

New Jersey's Department of Transportation plans to acquire 76 new suburban passenger cars and to buy and rehabiliate 50 second-hand cars. Transportation Commissioner David J. Goldberg said bids will be sought by May 1 on the design and construction of 30 new locomotive-hauled cars for the Erie Lackawanna. The Department will also apply for a federal grant for 46 new cars of the Jersey Arrow type for use on the Penn Central. The 50 old coaches will be purchased for use on the New York & Long Branch and Erie Lackawanna.

Microwave: A new NP landmark

Northern Pacific President Louis W. Menk was on the phone in St. Paul, Mayor Dorm Braman was on the phone in Seattle. Microwave was their conversation medium—and as the phone call started simultaneous news conferences in the two cities, NP declared its new $8.5-million microwave communications network officially open for business. The date was March 17—and, so far as Menk is concerned, that's a date no less important than Sept. 8, 1883, when NP completed its transcontinental rail line. Planning, engineering and construction of the 1,724-mile system stretched over five years.

Frisco is
"Betting a Bundle"
that a railroad can succeed
in the railroad business
A
we put our cards
on the table... inside

ERVICE EFFORT

dable Freight service

The day of the **perfect** freight service–with delays or problems completely eliminated – isn't here yet. But Frisco is working on it. We are totally dedicated to service improvement–it's our only business. We think Frisco's Total Service Effort is a sound "bet." If it pays-off for you, Mr. Shipper–we can't lose. Call our hand – try service from a railroad that's in the railroad business all the way.

When your freight goes

FRISCO

your freight goes!

ST. LOUIS-SAN FRANCISCO RAILWAY CO.

ROL

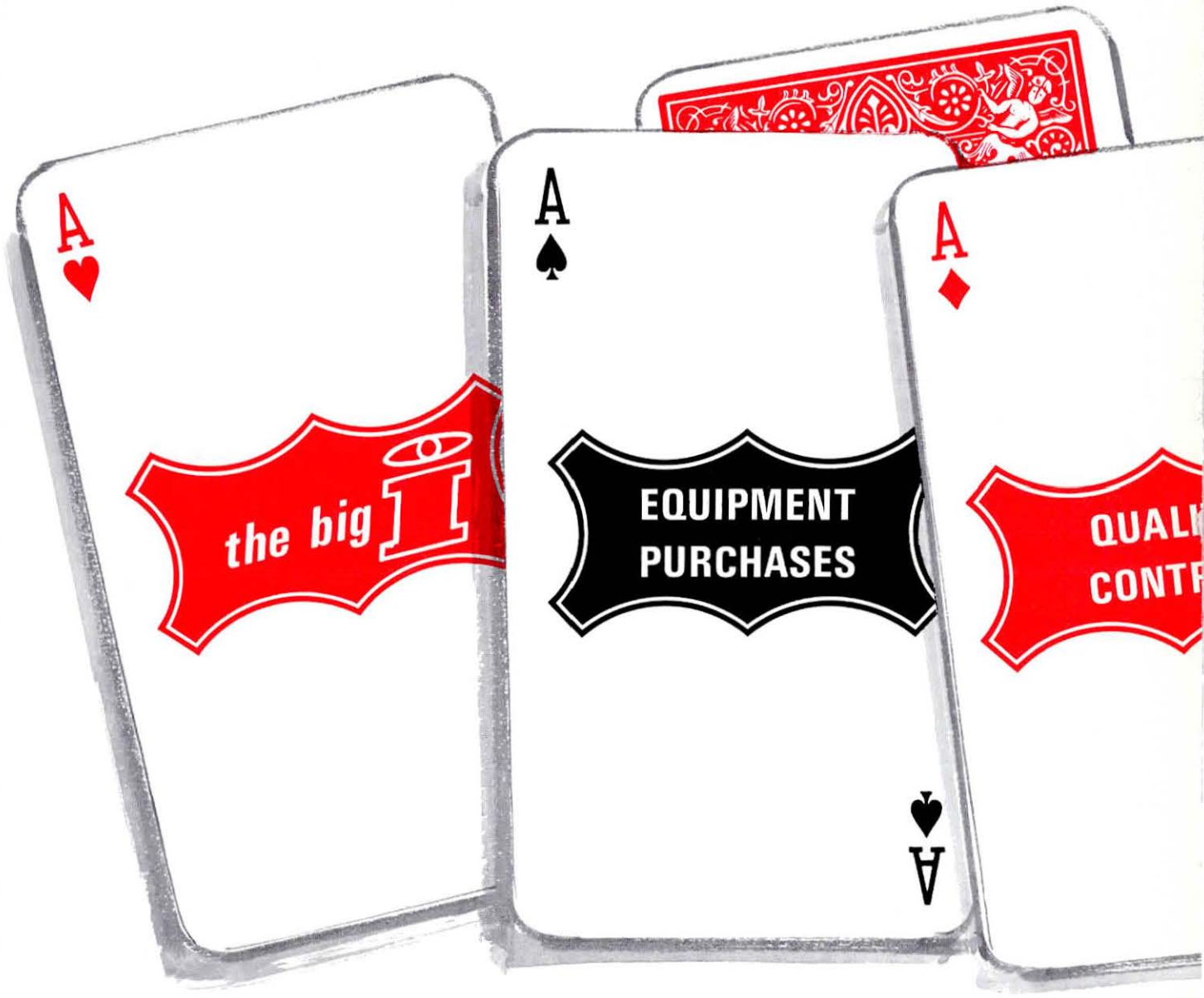
n its Quality
se is to make
eight service
possible. It
leneck," re-
me and put
schedule.

ADVANCE TRAINS

This program has substituted early deliveries for late deliveries. Now, during heavy load periods, rather than delaying excess freight—Frisco dispatches extra trains **ahead** of schedule. Our goal is on-time deliveries—whatever the load. "Waitin' at the station" is a rare thing on the Frisco.

FRISCO TOTAL SE

your best bet for depen



Instant Information

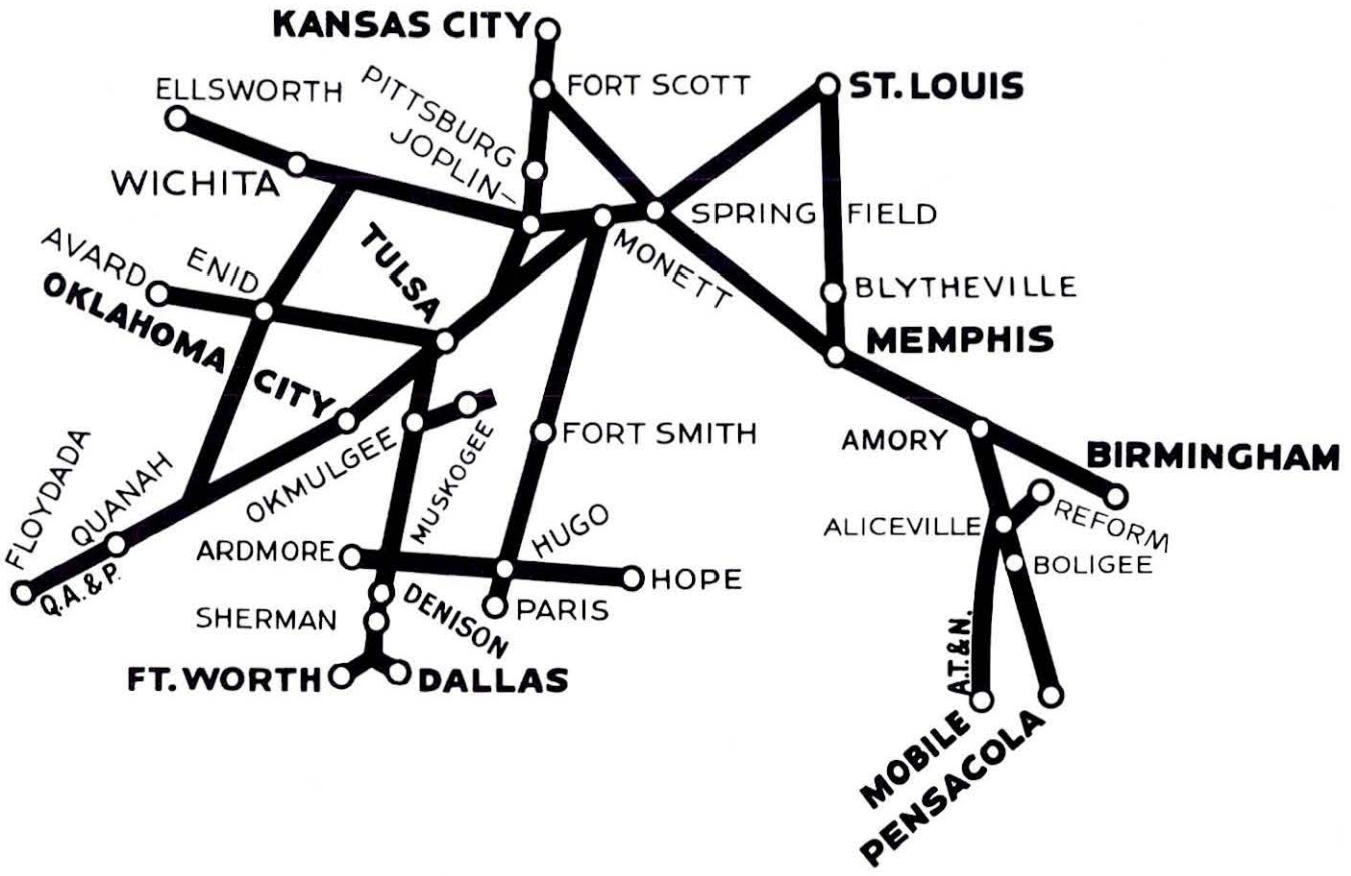
A new Frisco service that allows you to check on the status of your freight quickly and conveniently from off-line or on-line cities. Eliminates guesswork on your part. You know the delivery time for sure—so you can determine your work schedules accordingly, with no waste of time or labor.

EQUIPMENT PURCHASES & IMPROVED UTILIZATION

In the past five years Frisco's new equipment purchases have been substantial and consistent—well calculated to meet your needs. Our '69 purchases will be up. In these five years we have also increased through-freight trains from 36 to 60. And our quality control program has increased our miles per car per day by 50%.

QUALITY CONT

Four years ago Frisco bega
Control program. Its purpo
sure every phase of our fr
operates as efficiently as
broke the terminal "bott
duced delays and down t
our delivery schedules **on**



For Frisco total service effort shipping call your nearest sales office

ATLANTA, GA. 30329
Suite 123, 1655 Tullie Circle, N.E.
(404) 633-2628 and 633-2629

BIRMINGHAM, ALA. 35233
30 South 18th St.
(205) 322-3371

BLYTHEVILLE, ARK. 72315
207 South Third St.
(501) POplar 2-2383

BOSTON, MASS. 02108
Room 813-814, 294 Washington St.
(617) 542-7840

BUFFALO, N.Y. 14203
Room 955, 295 Main St.
(716) 856-4674

CAPE GIRARDEAU, MO. 63701
1 Good Hope St.
(314) EDgewater 5-3331

CHARLOTTE, N.C. 28202
Room 1202-1203, 112 S. Tryon St.
(704) 377-2576

CHATTANOOGA, TENN. 37402
Room 325, 11 W. 8th Street
(615) 266-6401

CHICAGO, ILL. 60603
Room 662, 140 S. Dearborn
(312) FRanklin 2-6622

CINCINNATI, O. 45202
Room 615, 30 E. Central Parkway
(513) 621-4631

CLEVELAND, O. 44113
Room 1148, 50 Public Square
(216) 621-2555

DALLAS, TEX. 75201
Room 914, 505 N. Ervay St.
(214) RIverside 2-7721

DAVENPORT IA. 52801
Room 614, 326 W. Third Street
(319) 326-3451

DENVER, COL. 80202
Room 1020, 555 17th St.
(303) 825-6716

DETROIT, MICH. 48202
Room 807, 7430 Second Avenue
(313) TRinity 5-3836

ENID, OKLA. 73701
802 N. Washington
(405) 237-0543

FORT SMITH, ARK. 72901
Room 100, 100 Garrison Avenue
(501) SUnset 3-4184

FORT WORTH, TEX. 76102
700 W. Vickery Blvd.
(817) EDison 6-5691

FRESNO, CAL. 93721
Room 513, 1044 Fulton Mall
(209) 485-9272

GREENVILLE, S.C. 29601
Room 808-809, 13-17 S. Main St.
(803) 233-3376

HOUSTON, TEX. 77002
Room 323, 708 Main Street
(713) CApitol 4-9154

HUGO, OKLA. 74743
800 West Main Street
(405) 326-2410

INDIANAPOLIS, IND. 46204
Room 815, 9 North Illinois Street
(317) 634-4686

JACKSON, MISS. 39206
4515 Office Park Drive
(601) 362-2431

JACKSONVILLE, FLA. 32202
Room 1123-24, 110 W. Forsyth St.
(904) 353-8914

JOPLIN, MO. 64802
1015 Main Street
(417) MAyfair 3-1705

KANSAS CITY, MO.
1266 Southwest Blvd. Kansas City, Kan. 66103 (913) ADams 6-6750

LITTLE ROCK, ARK. 72205
Room 305, 100 S. University Ave.
(501) MOhawk 6-2831

LOS ANGELES, CAL. 90005
Suite, 370, 500 South Virgil Ave.
(213) 381-2236

LOUISVILLE, KY. 40202
Room 1723, 332 West Broadway
(502) 583-5604

LUBBOCK, TEX. 79401
Suite 205, 1503 Ave. J
(806) POrter 3-9032

MACON, GA. 31201
Room 405, Southern United Bldg.
407 Cherry St., (912) 743-0232

MEMPHIS, TENN. 38103
Room, 510, 67 Madison Avenue
(901) 362-0370

MIAMI, FLA. 33131
Room 848, 25 S. E. Second Ave.
(305) 373-7489

MILWAUKEE, WIS. 53203
Room 1401, 231 W. Wisconsin Ave.
(414) 271-8373

MINNEAPOLIS, MINN. 55402
Room 500, 527 Marquette Avenue
(612) 336-2643

MOBILE, ALA. 36601
161 St. Michael Street
(205) 432-2748

MUSKOGEE, OKLA. 74401
401 S. 3rd Street
(918) MUrray 2-3891

NEW ORLEANS, LA. 70112
Room 501, 812 Gravier Street
(504) 522-2363

NEW YORK, N.Y. 10020
Room 1510, 9 Rockefeller Plaza
(212) CIrcle 6-3560

OKLAHOMA CITY, OKLA. 73125
300 S. W. 7th Street
(405) CEntral 2-1177

OMAHA, NEB. 68102
Room 500-501, 1905 Harney St.
(402) 341-6858

PENSACOLA, FLA. 32502
271 S. Pace Blvd.
(904) 432-6185

PHILADELPHIA, PA. 19107
Room 1340, 1345 Chestnut St.
(215) LOcust 7-6610

PHOENIX, ARIZ.
P.O. Box 3366, Scottsdale, Ariz.
85257 (602) 945-0652

PITTSBURGH, PA. 15222
Room 226, 535 Smithfield Street
(412) 281-2078

PORTLAND, ORE. 97205
Room 504, 1220 S.W. Morrison St.
(503) 222-1782

ST. LOUIS, MO. 63144
Suite 357, 1750 Brentwood Blvd.
(314) CHestnut 1-7800

SALT LAKE CITY, UTAH 84111
Room 709, 73 S. Main St.
(801) 355-6022

SAN ANTONIO, TEX. 78216
Room 114, 7077 N. San Pedro Ave.
(512) DIamond 2-7622

SAN FRANCISCO, CAL. 94103
1018 Hearst Bldg., 3rd and
Market Streets (415) 986-6432

SAVANNAH, GA. 31401
Room 210, 35 Bull St.
(912) 236-2401

SEATTLE, WASH. 98101
Room 4439, 1318 Fourth Avenue
(206) MAin 4-2112 and 4-2113

SHREVEPORT, LA. 71101
Room 401, 509 Marshall
(318) 425-4322

SPRINGFIELD, MO. 65802
Room 103, 3253 East Trafficway
(417) UNiversity 2-2722

TAMPA, FLA. 33610
Room 247, 1920 E. Hillsborough
Ave. (813) 236-5951

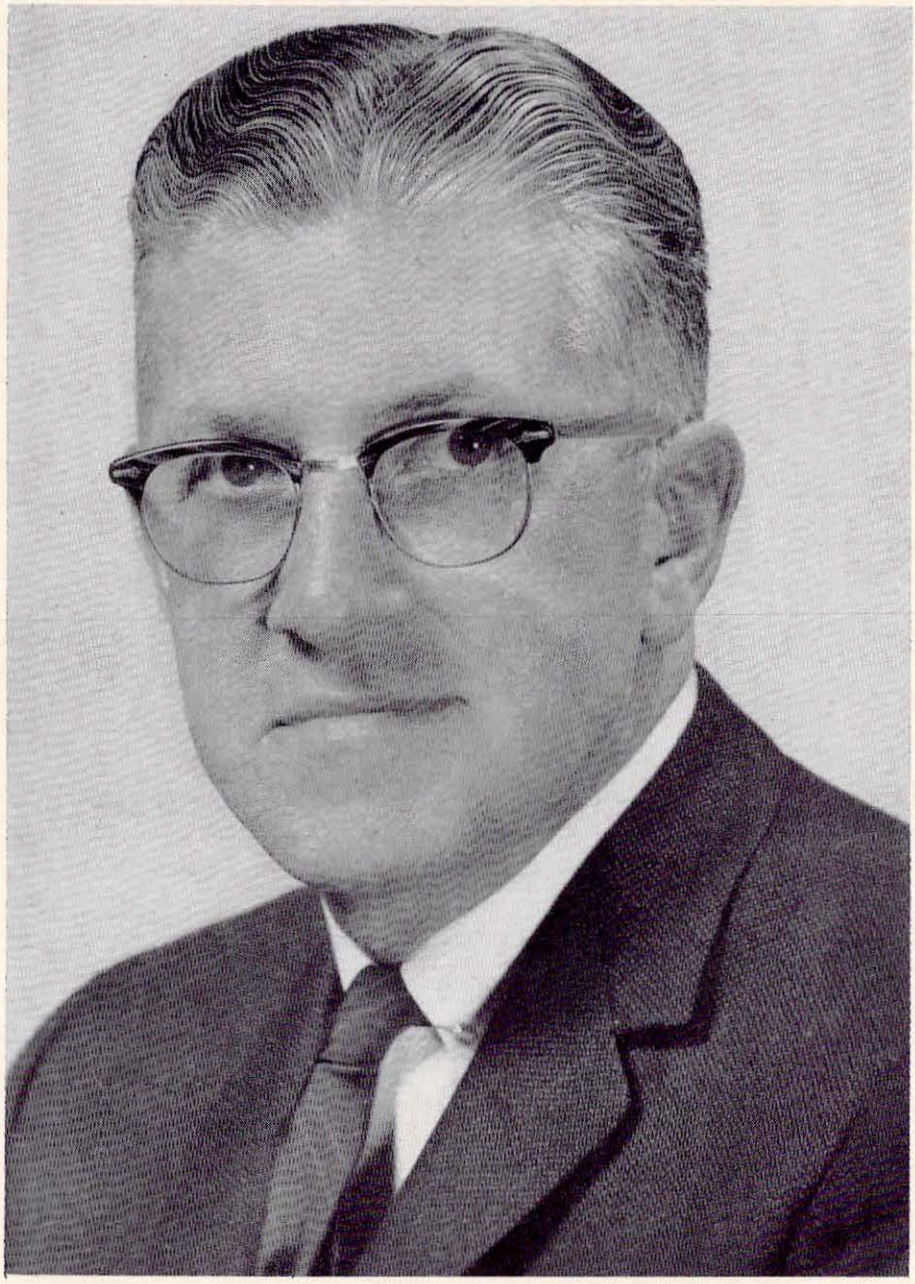
TULSA, OKLA. 74103
Room 1608, 15 E. 5th St.
(918) HIckory 6-6661

WASHINGTON, D.C. 20005
Room 611-15, 1511 K. St. N.W.
(202) EXecutive 3-1231

WICHITA, KAN. 67202
Room No. 1, 701 E. Douglas
(316) FOrest 3-7221

WINSTON-SALEM, N.C. 27101
Room 418, 310 W. Fourth Street
(919) 722-7255

"Quick and confident grasp of the current situation"

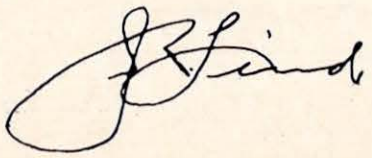


ARMCO

JOHN N. LIND, DIRECTOR OF TRANSPORTATION
Armco Steel Corporation

"The pace of progress has accelerated to the extent that each of us must continually examine his function and responsibility with a view to beneficial revision and improvement.

"To that end, Railway Age with its readability and pertinent content, is a valuable aide in securing a quick and confident grasp of the current situation; and in addition, past issues often serve as desirable reference material."

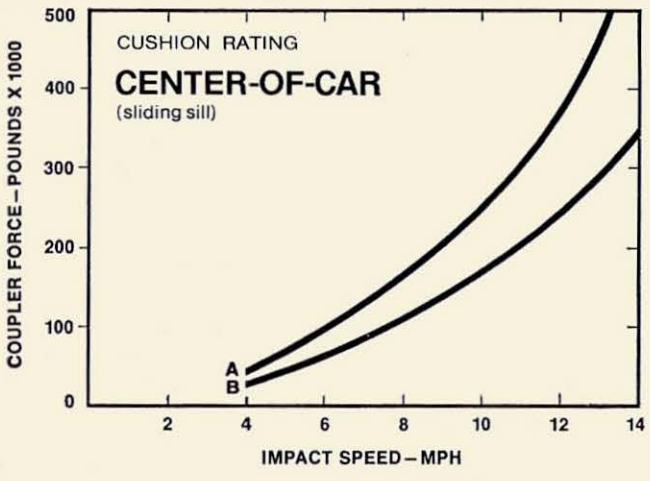


CUSHIONING TESTS PROVE ACF FREIGHT-SAVER™ PROTECTS BEST.

Give your ladings a break, not breakage. Specify ACF Freight-Saver cushioning for your cars.

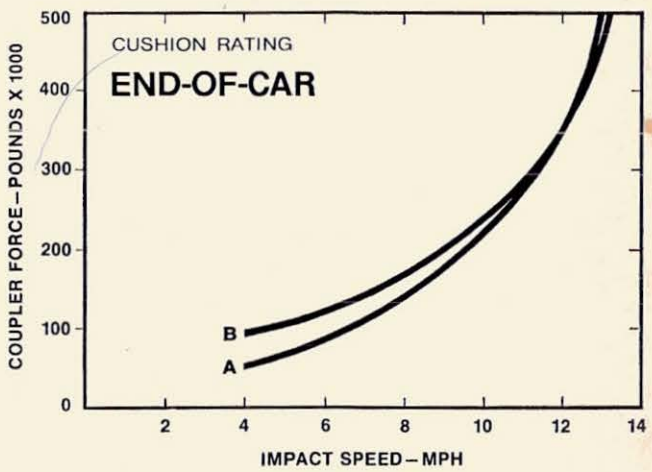
Recent independent tests prove Freight-Saver units cushion best. They give greater protection to ladings for fewer damage claims, and they require minimum maintenance for longer life.

The tests were conducted according to rigid AAR specifications. Here is how Freight-Saver center-of-car units compared with a typical sliding sill device. Both units have 20" of travel.



Curve A: Typical 20" sliding sill unit rates at 500,000 pounds coupler force at 13.2 mph.
Curve B: ACF's Freight-Saver 20" center-of-car sliding sill unit rates at 340,000 pounds coupler force at 14.0 mph.

And here is how ACF's Freight-Saver end-of-car system measures up.



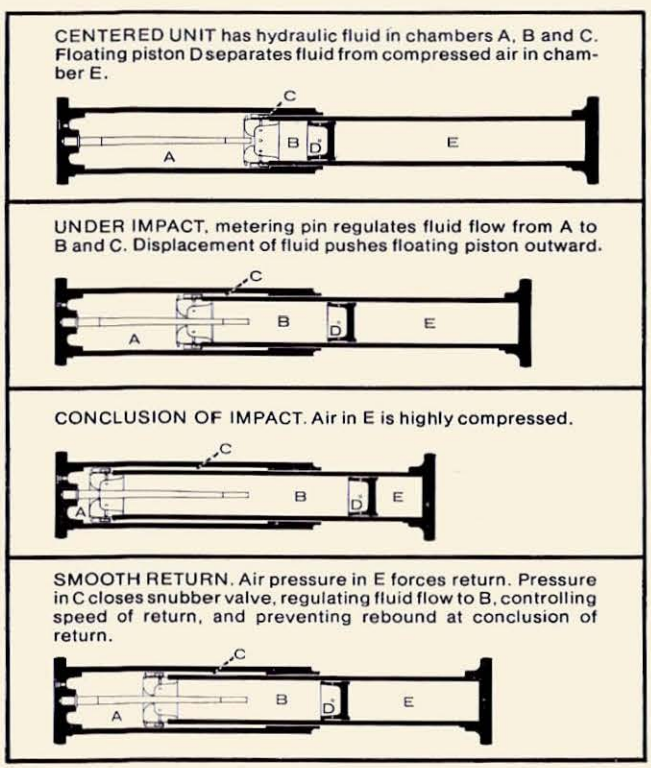
Curve A: Competitive 15" end-of-car cushioning rates at 500,000 pounds coupler force at 13.0 mph.
Curve B: ACF's Freight-Saver 15" end-of-car cushioning unit rates at 500,000 pounds coupler force at 13.2 mph.

That's protection. And Freight-Saver has more to offer: Better impact behavior characteristics and unsurpassed reliability.

Freight-Saver never goes "solid." Because there's no metal to metal contact, there is almost no wear in buff and draft. Its unique self-contained air spring provides positive recentering without the lash-back characteristic of mechanical spring recentering systems.

Reliability made Freight-Saver famous. Freight-Saver's industry-wide reputation for dependability is due largely to the fact it has just 4 moving parts. Freight-Saver's record of year-in, year-out service without maintenance is unmatched. It's one more reason why there are more than 15,000 Freight-Saver units in service or on order today.

FREIGHT-SAVER CENTER-OF-CAR UNIT IN ACTION. The Freight-Saver unit's simple design assures reliability.


CENTERED UNIT has hydraulic fluid in chambers A, B and C. Floating piston D separates fluid from compressed air in chamber E.
C
A
B
D
E
UNDER IMPACT, metering pin regulates fluid flow from A to B and C. Displacement of fluid pushes floating piston outward.
C
A
B
D
E
CONCLUSION OF IMPACT. Air in E is highly compressed.
C
A
B
D
E
SMOOTH RETURN. Air pressure in E forces return. Pressure in C closes snubber valve, regulating fluid flow to B, controlling speed of return, and preventing rebound at conclusion of return.
C
A
B
D
E

More cushioning per dollar. For new cars up to 60 feet long, Freight-Saver center-of-car cushioning provides more cushioning per dollar invested than any other available system.

Center-of-car Freight-Saver sliding sill units save weight. Freight-Saver sliding sill devices save up to 2,000 pounds compared with spring-return center-of-car cushion systems.

Freight-Saver advantages improve end-of-car cushioning, too. For new cars longer than 60′ and for upgrading older cars, ask for Freight-Saver end-of-car cushioning. It's easy and less costly to install. And it keeps your cars on the go for extra years of profitable, damage-free service.

Freight-Saver protects your ladings, your cars and your profits best. For more details, call or write ACF Industries, Incorporated, American Car & Foundry Division, St. Charles, Missouri 63301.

MEMBER RPI RAILWAY PROGRESS INSTITUTE

acf ACF INDUSTRIES

WE'RE DELIVERING DOOR TO DOOR

A lot of Northern Pacific thinking goes into developing new concepts of distribution.

One example is our exclusive Big Pasco Plan, which cuts distribution costs in the Pacific Northwest. Here's how it works:

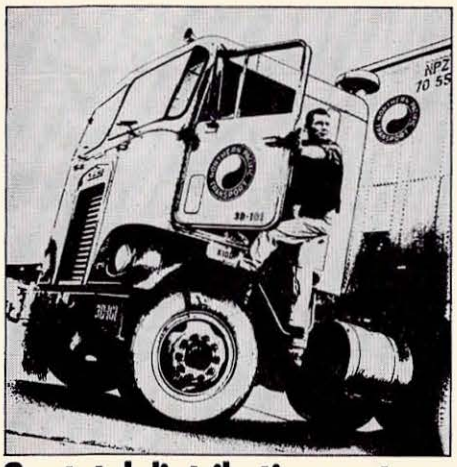
Your freight moves by fast NP rail service from east of the Rockies to Pasco, Washington.

From this hub, we deliver to store doors and docks in 475 Washington, Oregon and Idaho communities. By rail, piggyback or our own trucks. Whichever is best.

We do this at published distributive rates which can save you 11% to 89% in distribution costs over other methods. And if you need it, in-transit storage can be arranged, too.

For a free detailed booklet on the Big Pasco Plan, contact your nearest NP representative. Or write The Big Pasco Plan, Northern Pacific Railway, Central Building, Seattle, Washington 98104.

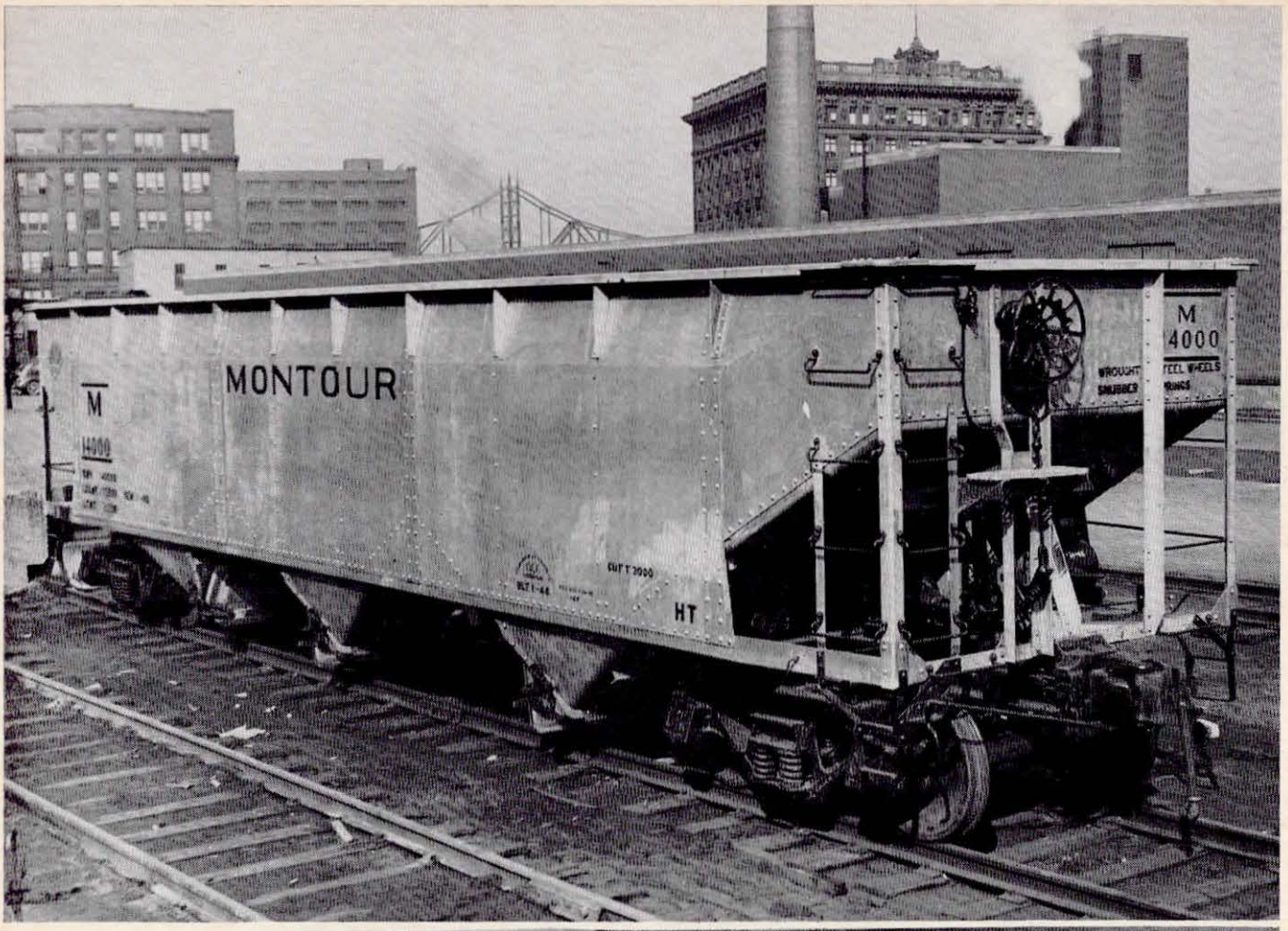
This is the way to run a railroad. The way we run the Northern Pacific.

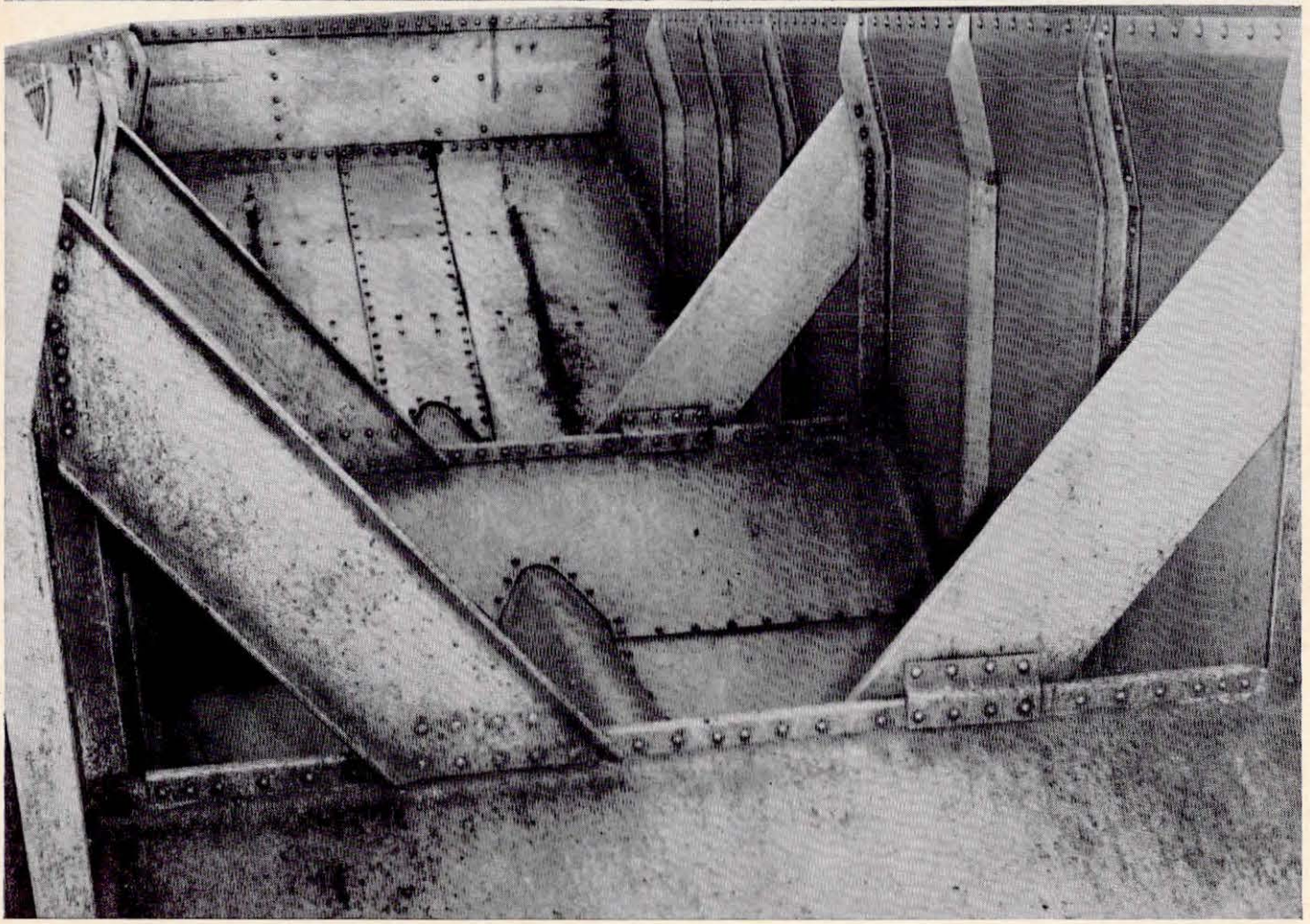


Our total distribution system moves your goods directly to your customers.

WE'RE PULLING A FEW SURPRISES ON THE NORTHERN PACIFIC RAILWAY

Circle 10 on coupon page 69


MONTOUR
M
4000
HT



1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969...

For the past 23 years, this aluminum coal car has been rotary-dumped on the average of twice every three days. It still has a lot of life left. It's Alcoa® Aluminum. (The Montour 14000 was built in 1946 by American Car & Foundry.)

Tests over a 30-year period on aluminum and steel hoppers in a corrosive environment have shown that aluminum retains nearly four times the tensile strength of steel. In fact, other materials failed after 17 years, while the aluminum hoppers still had years of service left after 30.

Long life, extra payload—up to 8 tons in a 100-ton car—and low maintenance are some of the features that aluminum offers the transportation industry. The men who know aluminum best are at Alcoa. To find out more about the advantages of aluminum, send this coupon.

Aluminum Company of America
1750 QQ Alcoa Building
Pittsburgh, Pa. 15219

Gentlemen: Please send me information on ☐ corrosion studies; ☐ economies of aluminum-bodied coal cars.

Name _____

Company _____

Address _____

City _____ State _____ Zip _____

Change for the better with Alcoa Aluminum

ALCOA

Changes, changes, changes. No wonder Katy attracts more shippers all the time.

KATY's new look is symbolic of new cars, locomotives, rails, ties, offices, communications equipment and other visible changes throughout the system. Best of all, it symbolizes new ways in which KATY lets you know you're the boss. With personalized service that cuts through red tape and ancient shipper-be-damned attitudes.

Want to be the boss when you ship by rail? Just call KATY's nearby representative.

Count on KATY

MISSOURI-KANSAS-TEXAS RAILROAD CO.
Katy Building, Dallas 75202 • 420 Gimblin Road, St. Louis 63147

Circle 12 on coupon page 69

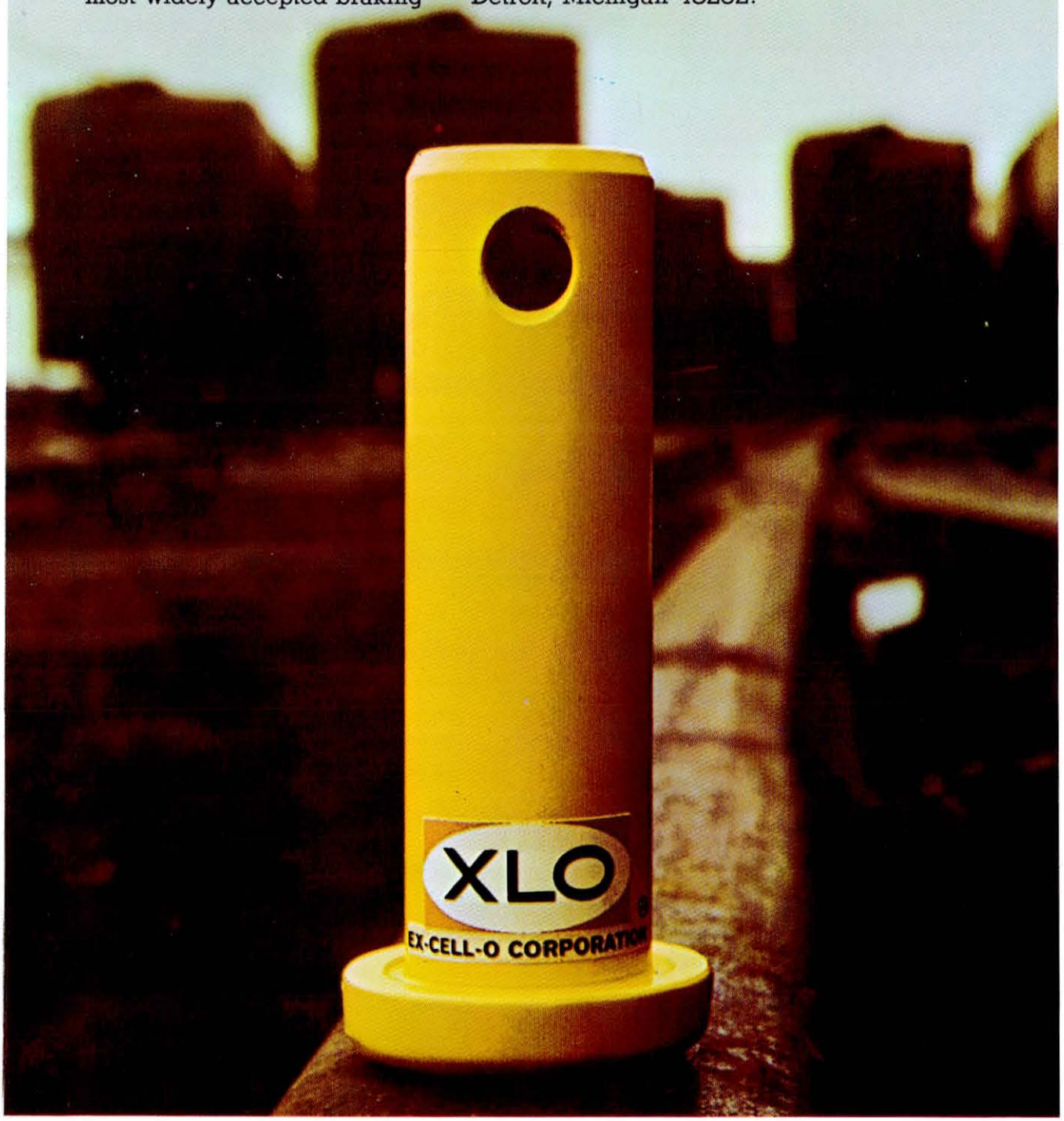
Ask WABCO about Ex-Cell-O's track record.

Westinghouse Air Brake Division demands a lot of itself. And consequently delivers a lot to its customers. Brakes that stop today's high-speed, high-mileage freight cars faster and more economically.

As a result, the WABCOPAC brake assembly is one of the most widely accepted braking systems in the industry.

One of the ways WABCO stays on top is with Ex-Cell-O F Series Pins—the toughest you can buy. Pins that roll hundreds of thousands of proven maintenance-free miles.

Like to hear more? Write Railway Products, Ex-Cell-O Corporation, Box 386, Detroit, Michigan 48232.



You're way Fruehauf

We think we could get away with this statement if we did nothing but make trailers and containers. It happens we made the first trailer. We make the most trailers and containers. There are those who think we make the best.

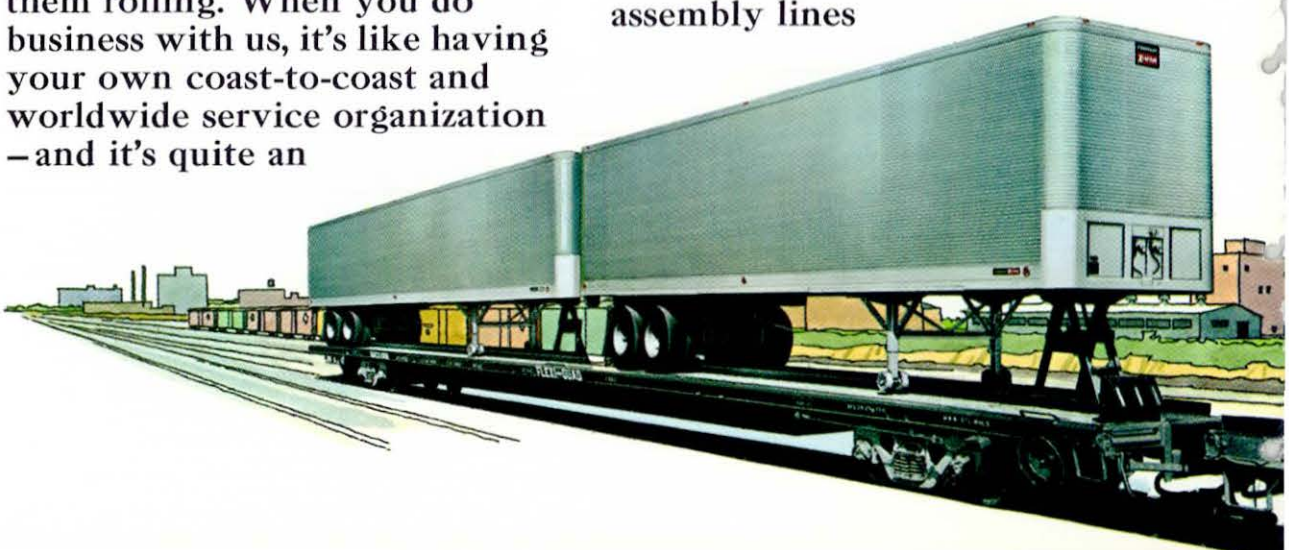
But that's only part of the story.

Let's assume you want one of our trailers or containers and

you want it now. Okay. At any given moment our 12 plants and 85 branches have some 2,800 units – all kinds – in stock. Ready to roll.

And we're set up to keep them rolling. When you do business with us, it's like having your own coast-to-coast and worldwide service organization – and it's quite an organization. Every one of our 108 service locations (85 in U.S. and Canada plus 23 overseas ports) is a factory in miniature, stocked with enough parts to build complete units.

But that isn't how we build them to begin with. We build them in highly automated plants that keep our costs down. You take our Model F van, for instance. What we did was to find out exactly what design features trailer operators want in a van, never mind the cost. Then we engineered them into one standard van – or maybe we should say one above-standard van. We make this above-standard van on assembly lines



ahead with behind you.

in 6 plants. Because of this you don't have extra charges for top-quality construction or features like pre-painted aluminum panels, posts, etc. Even the sliding tandem suspension, a very real advantage, comes on the Model F at no extra cost. To sum it all up, the Model F costs you about what you pay for an ordinary trailer, but you can figure it will make more money for you.

You get an edge with all Fruehauf equipment. Our containers, for instance. They are exceptionally strong for their weight, especially the critical front and rear walls. The rear walls, which must open and close fully, withstand a 27,000-pound test. It's not surprising that our containers are the most widely used in this rapidly expanding transportation mode.

And our Z van for piggy-backing. We engineered it with the strongest coupler, the strongest front end and the strongest rear end in the industry. It is uniquely capable of withstanding the jolts and jars of railroad operation.

What we try to do, across the

board, is give you more equipment per dollar to begin with. We want you to feel that you're not only way ahead with Fruehauf behind you – you're way ahead before you even hitch up.

If you have any questions on any of our equipment, just write Fruehauf Corporation, Detroit, Michigan 48232.

Bill Grace

Corrosion stopper for hoppers.

Durable epoxy linings based on Shell Epon® resin withstand abrasion and chemicals, protect product purity, last for many years.

Low cost per year of service is the big advantage of hopper car linings based on Shell Epon resin. These tough, highly adherent coatings stand up to nearly all bulk ladings. Sand, gravel, sugar, salt, flour, grains, chemicals, plastics and others. And they do it year after year with virtually no maintenance. Some applications have gone 8 years with only minor touch-up.

Finished lining in this car will protect Shell plastics from contamination.

More advantages: products are kept clean and pure; smoothness of lining makes product discharge easy; and the coating is safe to apply.

Need a better corrosion stopper for your hoppers? *Write us on your letterhead*, and we'll have a supplier of Epon resin-based linings get in touch with you.

Shell Chemical Company, Plastics & Resins Division
113 West 52nd Street, New York, N.Y. 10019

SHELL

Lining: Polyclutch® epoxy by PPG Industries, Inc.; Applicator: Lithcote Corp.; Car: mfd. by Shippers Car Line, Div. ACF Industries, Inc.

Frank

ATTENTION

MESSAGE OF INTEREST UNDERNEATH

NG
NGTON

THE he men named as air, road
nators use one ear for the
They listen carefully as air
, then extract promises of

NO flecting public opinion (down
budget marks just $23 mil-
stration while Highway gets
trust fund) and Aviation gets
nation hearings, there's a loud
e budget is not rigid.

nt change of heart by railroads
deral breadline. That's because
s have missed the import of be-
nsport system. Belonging means
hat rails haven't missed as much
to pursue.

NOW COMES AAR with a request for subsidy to keep alive that passenger service the government says is needed. This is greeted with skepticism on the Hill: Rails are asking, not offering. But the point is that they're asking at all. The request may seem like a small crack in an anti-subsidy outlook, but it represents the start of a big turnaround, based on the realization first that railroads can't really get out of the passenger business and second that they've got to tie in with the system.

SWEEPING CHANGES are promised by Thomas M. Goodfellow, AAR president, to bring the industry into the national network properly. From the new AAR headquarters, announcements flow steadily since New Year's. In addition to the research project revealed this week, they cover two areas about which Congressmen express the greatest concern. For safety, AAR says the lag between maintenance of way and modern equipment will shrink. For car utilization, there will be a computerized rail-system model, intermodal data sharing, an electronic rail-car information and identification network, and a purge of equipment delays.

THE FIRST TEST of improved hearing will come in Hill reaction to AAR's first legislative proposals to the 91st Congress —protection against discriminatory taxes and permission to amortize merger expenses.

Biaggini: Why can't we own other modes?

The need for legislation permitting common ownership—a theme recurring more and more frequently in talks by railroad executives—was discussed by Southern Pacific President B. F. Biaggini in a talk before the Freight Forwarders Institute meeting at Los Angeles.

"We see one-package service as the answer to the nation's growing transportation needs," said Biaggini, "and we strive to be a complete department store of transportation which can fill those needs. We want to be . . . a truly intermodal, streamlined transportation company offering across-the-board services."

Southern Pacific has already started moving toward becoming a diversified transportation company. It owns and operates 8,000 trucks from 104 terminals, and its highway routes encompass more than 27,000 miles. It operates a pipeline system and has tried unsuccessfully to acquire a barge line. Currently, SP has an application before the Civil Aeronautics Board requesting permission to engage in air freight forwarding.

" . . . We don't want to get out of the railroad business," Biaggini said. "But we certainly do want to get more deeply and more widely into the transportation business."

Presently, railroads are prohibited from owning competing modes of transportation. Said Biaggini: "Our view is that any transportation company should be free to engage in any type of transportation."

Biaggini pointed out that SP had invested substantial sums recently in improving plant, equipment, and operations, with the objective of improving rail service.

One aspect of service—damage prevention—is also a responsibility of shippers, Biaggini said, pointing out that 15% of all cars are released in dirty conditions. "Southern Pacific alone spends about $15 million a year on cleaning cars," he said. "If American railroads could somehow eliminate overnight this car cleaning problem—which is essentially a shipper responsibility—they could boost annual carloadings from the present 28 million to 31.4 million without any increase in the car fleet, and we all would hear far less talk about car shortages." ■

AAR PRESIDENT GOODFELLOW TALKS ABOUT:

A new research effort for the

When Thomas M. Goodfellow took over the presidency of the Association of American Railroads on June 1, 1967, Railway Age described him as "a public-relating railroader" who could be expected to make image-building a top priority item in Washington. Goodfellow has done just that, and with considerable success. But Goodfellow strongly believes that "you must never tell a story that you cannot back up with performance." To find out what the AAR is doing not only to tell the railroads' story, but to back it up with performance, Railway Age Editor Luther Miller and Senior Editor Gus Welty taped the following interview with President Goodfellow.

Q. Mr. Goodfellow, in the past railroads have been criticized for research programs that some have called "too little and too late." What plans do you have for expanding and perhaps redirecting the AAR's research effort?

A. The board of directors at our last meeting instructed us to go ahead with a program of research and testing which has been recommended by our Research Advisory Committee. This committee is made up of top people in the industry who are interested in research of all kinds. We are at the present time engaged in trying to find a vice president of research who will head up this department.

Q. How will this program differ from your past research program?

A. I suppose the most radical change we're going to make is to separate testing and research. They have been intermingled over the last 15 or 20 years. As a result, the research effort has sometimes lost ground because of the attention that had to be paid to testing. We still think—and the committee recommended—that we should maintain a very extensive testing program. In fact, the committee recommended that the testing program be increased by about a third so far as dollars are concerned. But the committee also recommended that the research effort stand by itself so that it would not be overshadowed by testing. This doesn't mean the testing people won't perhaps do work for the research people. It simply means the research people will have a free hand to explore anything they think will enable our railroads to become profit centers.

Q. Will this be essentially hardware research?

A. No. Our basic objectives are to make the industry more profitable, to generate new business, to reduce costs, to anticipate problems before they overtake us, to create new opportunities all along the line. This calls for expanding the scope of our research program so that it will be responsive to all aspects of railroading, not just cars, roadway and structures. Our interest in mechanical and civil engineering will not be diminished. On the contrary, we plan to do even more work in these areas. But we are also going to get involved in industrial engineering, electronics, electrical engineering, chemical engineering and operations research, as well as other technical disciplines.

We'll step up our economics research as well. We need to know what we did yesterday and what we are doing today. But what interests us more is what we will be doing tomorrow. So market research will be a very important part of our program. Our objective, as I said, is to research any phase of railroading that has anything to do with making the railroads successful.

Q. You mentioned that the testing budget might be increased by one third. How about the research budget?

A. The research program is to be doubled immediately. The committee has recommended that we take it as high as $2 million in subsequent years. But, at the present time, we're thinking of doubling our existing budget of about a quarter of a million dollars.

Q. What kind of staff do you have in mind?

A. In addition to a new vice president, we will probably need a very strong man in charge of testing, and of course under him the necessary people to do a superior job. On the research side, we will have to make sure that our staff includes people who are knowledgeable about all facets of railroading.

Q. This department would work on projects requested by the member roads as well as those initiated by the department itself?

A. Oh, yes, we'd want the member

Frank Malone

WATCHING WASHINGTON

THE SENATE HEARS and confirms the men named as air, road and retail administrators. But Senators use one ear for the first two, another for the third. They listen carefully as air and road needs are billboarded, then extract promises of better rail service.

NO ONE CAN BLAME them for reflecting public opinion (down on rails). The 1970 (Johnson) budget marks just $23 million for the Railroad Administration while Highway gets $1.6 billion (plus $4.6-billion trust fund) and Aviation gets nearly $1 billion. At the nomination hearings, there's a loud hint that for air purposes, the budget is not rigid.

WHAT'S MISSED is an apparent change of heart by railroads about stepping into the federal breadline. That's because too many people think rails have missed the import of belonging to a national transport system. Belonging means taking federal aid, a fact that rails haven't missed as much as they've been unwilling to pursue.

NOW COMES AAR with a request for subsidy to keep alive that passenger service the government says is needed. This is greeted with skepticism on the Hill: Rails are asking, not offering. But the point is that they're asking at all. The request may seem like a small crack in an anti-subsidy outlook, but it represents the start of a big turnaround, based on the realization first that railroads can't really get out of the passenger business and second that they've got to tie in with the system.

SWEEPING CHANGES are promised by Thomas M. Goodfellow, AAR president, to bring the industry into the national network properly. From the new AAR headquarters, announcements flow steadily since New Year's. In addition to the research project revealed this week, they cover two areas about which Congressmen express the greatest concern. For safety, AAR says the lag between maintenance of way and modern equipment will shrink. For car utilization, there will be a computerized rail-system model, intermodal data sharing, an electronic rail-car information and identification network, and a purge of equipment delays.

THE FIRST TEST of improved hearing will come in Hill reaction to AAR's first legislative proposals to the 91st Congress —protection against discriminatory taxes and permission to amortize merger expenses.

Biaggini: Why can't we own other modes?

The need for legislation permitting common ownership—a theme recurring more and more frequently in talks by railroad executives—was discussed by Southern Pacific President B. F. Biaggini in a talk before the Freight Forwarders Institute meeting at Los Angeles.

"We see one-package service as the answer to the nation's growing transportation needs," said Biaggini, "and we strive to be a complete department store of transportation which can fill those needs. We want to be . . . a truly intermodal, streamlined transportation company offering across-the-board services."

Southern Pacific has already started moving toward becoming a diversified transportation company. It owns and operates 8,000 trucks from 104 terminals, and its highway routes encompass more than 27,000 miles. It operates a pipeline system and has tried unsuccessfully to acquire a barge line. Currently, SP has an application before the Civil Aeronautics Board requesting permission to engage in air freight forwarding.

" . . . We don't want to get out of the railroad business," Biaggini said. "But we certainly do want to get more deeply and more widely into the transportation business."

Presently, railroads are prohibited from owning competing modes of transportation. Said Biaggini: "Our view is that any transportation company should be free to engage in any type of transportation."

Biaggini pointed out that SP had invested substantial sums recently in improving plant, equipment, and operations, with the objective of improving rail service.

One aspect of service—damage prevention—is also a responsibility of shippers, Biaggini said, pointing out that 15% of all cars are released in dirty conditions. "Southern Pacific alone spends about $15 million a year on cleaning cars," he said. "If American railroads could somehow eliminate overnight this car cleaning problem—which is essentially a shipper responsibility—they could boost annual carloadings from the present 28 million to 31.4 million without any increase in the car fleet, and we all would hear far less talk about car shortages." ■

AAR PRESIDENT GOODFELLOW TALKS ABOUT:

A new research effort for the

When Thomas M. Goodfellow took over the presidency of the Association of American Railroads on June 1, 1967, Railway Age described him as "a public-relating railroader" who could be expected to make image-building a top priority item in Washington. Goodfellow has done just that, and with considerable success. But Goodfellow strongly believes that "you must never tell a story that you cannot back up with performance." To find out what the AAR is doing not only to tell the railroads' story, but to back it up with performance, Railway Age Editor Luther Miller and Senior Editor Gus Welty taped the following interview with President Goodfellow.

Q. Mr. Goodfellow, in the past railroads have been criticized for research programs that some have called "too little and too late." What plans do you have for expanding and perhaps redirecting the AAR's research effort?

A. The board of directors at our last meeting instructed us to go ahead with a program of research and testing which has been recommended by our Research Advisory Committee. This committee is made up of top people in the industry who are interested in research of all kinds. We are at the present time engaged in trying to find a vice president of research who will head up this department.

Q. How will this program differ from your past research program?

A. I suppose the most radical change we're going to make is to separate testing and research. They have been intermingled over the last 15 or 20 years. As a result, the research effort has sometimes lost ground because of the attention that had to be paid to testing. We still think—and the committee recommended—that we should maintain a very extensive testing program. In fact, the committee recommended that the testing program be increased by about a third so far as dollars are concerned. But the committee also recommended that the research effort stand by itself so that it would not be overshadowed by testing. This doesn't mean the testing people won't perhaps do work for the research people. It simply means the research people will have a free hand to explore anything they think will enable our railroads to become profit centers.

Q. Will this be essentially hardware research?

A. No. Our basic objectives are to make the industry more profitable, to generate new business, to reduce costs, to anticipate problems before they overtake us, to create new opportunities all along the line. This calls for expanding the scope of our research program so that it will be responsive to all aspects of railroading, not just cars, roadway and structures. Our interest in mechanical and civil engineering will not be diminished. On the contrary, we plan to do even more work in these areas. But we are also going to get involved in industrial engineering, electronics, electrical engineering, chemical engineering and operations research, as well as other technical disciplines.

We'll step up our economics research as well. We need to know what we did yesterday and what we are doing today. But what interests us more is what we will be doing tomorrow. So market research will be a very important part of our program. Our objective, as I said, is to research any phase of railroading that has anything to do with making the railroads successful.

Q. You mentioned that the testing budget might be increased by one third. How about the research budget?

A. The research program is to be doubled immediately. The committee has recommended that we take it as high as $2 million in subsequent years. But, at the present time, we're thinking of doubling our existing budget of about a quarter of a million dollars.

Q. What kind of staff do you have in mind?

A. In addition to a new vice president, we will probably need a very strong man in charge of testing, and of course under him the necessary people to do a superior job. On the research side, we will have to make sure that our staff includes people who are knowledgeable about all facets of railroading.

Q. This department would work on projects requested by the member roads as well as those initiated by the department itself?

A. Oh, yes, we'd want the member

railroads

"Our objective is to research any phase of railroading that has anything to do with making the railroads successful."

roads to give us as many challenges as possible and we'd also like to have some challenges from the Department of Transportation. On our own, of course, we hope to originate many projects. I don't want anyone to get the idea that this is going to be a Cloud 9 effort. We don't picture it as that at all. We just want a hard-facts research effort that will cover all things having to do with making railroads successful companies.

Q. Would this program incorporate such existing projects as the joint AAR-FRA study on the automatic coupler and perhaps the Santa Fe-FRA test track proposal?

A. I think time would have to decide whether we would take such projects over completely, or whether our research people would join with the Department of Transportation in some such way as our present laboratory now works with DOT. There's a possibility of our becoming a contractor for the Department, and in that case, of course, projects like the coupler study and the test on the Santa Fe probably would be done by us with some monetary assistance and perhaps staff help from DOT.

Q. What do you hope to accomplish through market research?

A. We want a program that will treat the industry as a whole. A great deal of market research has been done in the past by individual railroads, and I would think that this would continue. But, hopefully, we can do a meaningful job on an industry-wide basis.

Q. Looking for whole new markets for railroad service?

A. That's right—and looking for better ways of handling business we already have. This is another case of which comes first, the chicken or the egg. Do you find the market before you build the equipment, or do you build the equipment in order to get a market?

Q. What we're really talking about is tomorrow's railroads. What do you think the railroad of the future will be like?

A. I think tomorrow's railroad will be interested about 99% of the time in hauling goods. I also think we will have, in certain sections of the country, passenger trains similar to the Metroliners that run between New York and Washington. These other locations will have to be researched, but I think the day will come when we will have high-speed trains between very densely populated centers. I don't know what tomorrow's motive power will be. I do know we must—and we will—find a way to lick what is probably our largest problem today, and that is getting freight cars through terminals.

Q. In that connection, there are increasing reports of shipper dissatisfaction with the quality of railroad service. Is this because the complaints are getting more publicity than they have in the past? Or has there actually been a deterioration?

A. I would be less than truthful if I said this was just a matter of the publicity given the complaints. It's due, I'm afraid, to the fact that many of our customers have had cause to complain. We've had a bad winter in many sections of the country—floods in the West, snow in the East and the North. Mergers have naturally caused some problems. It takes time, not only for the merged properties to learn to work together, but also for the connecting properties to learn how to work with the merged company. I believe this has had some effect on the quality of our service. The industry has recognized this is a real problem, almost an emergency, and at our recent meeting in Boca Raton we went into this very thoroughly. The railroads have pledged a real campaign to improve their service, to get their performance up. At the same time, the AAR assigned its car service agents to the special task of helping to pinpoint delays and calling trouble spots to the attention of the railroads in their respective territories. In addition to that, the AAR board has appointed a committee—Bill Quinn of the Burlington, Stuart Shumate of the RF&P and Al Perlman of the Penn Central—to see what steps the industry should take. We know we have to do something about performance

if we're going to stay in business. I think things have already taken a turn for the better, and the next couple of months will see great improvement in our service.

Q. Is this a short range program you have in mind, to deal with the immediate problem, or do you have hopes the committee will produce longer range solutions?

A. This is almost an ad hoc committee dealing with the situation as it is today. I hope permanent procedures will come out of it. But at the present time we are concerned —and deeply concerned—with the immediate problem.

Q. Can you suggest any specific areas that are being looked at right now where we might see some early improvement? St. Louis, for example?

A. One of the problems in St. Louis has been to get the trains blocked properly on either side of the city so that more cars could go through without switching. I understand this has now been accomplished to a considerable extent. The same thing has been true at Chicago. The fewer cars we have to handle in the Chicago switching area, the faster the freight will go through. I believe there has already been much improvement there.

Q. Doesn't all of this—your research program, your industry-wide approach to service improvement—suggest an increasing unity in an industry which has been so often criticized for being rather disunited?

A. I like to think that the industry is a little better united than it was. I believe our chief executives are becoming more and more aware that they'd better hang together or they'll all hang separately. They've found out that it isn't enough just to blame the other fellow—that they've got to get together and really give the shipper the service he needs.

Q. Do you think the AAR can exert more leadership than it has exerted historically to promote this kind of unity?

"We must, and we will, find a way to lick our largest problem today—getting freight cars through terminals."

A. The AAR is not something apart from the industry. The AAR *is* the industry. I do think the industry leaders are going to get together more and more and exert leadership themselves, and perhaps use the AAR staff as an instrument for continued improvement. Decisions by the members of our board, who are keenly aware of the thinking of the non-members, will lay out what the AAR will do. Right now the industry is exerting leadership by providing for immediate action to solve the service problem, by going ahead with an expanded research program and by proceeding with TRAIN and ACI. All these things indicate to me that a unified industry is moving ahead and looking forward to the 21st century.

Q. Another indication perhaps of increasing industry unity was the unanimous decision of AAR directors to seek government aid in keeping necessary passenger trains running. Are you optimistic that the necessary support can be generated in Congress?

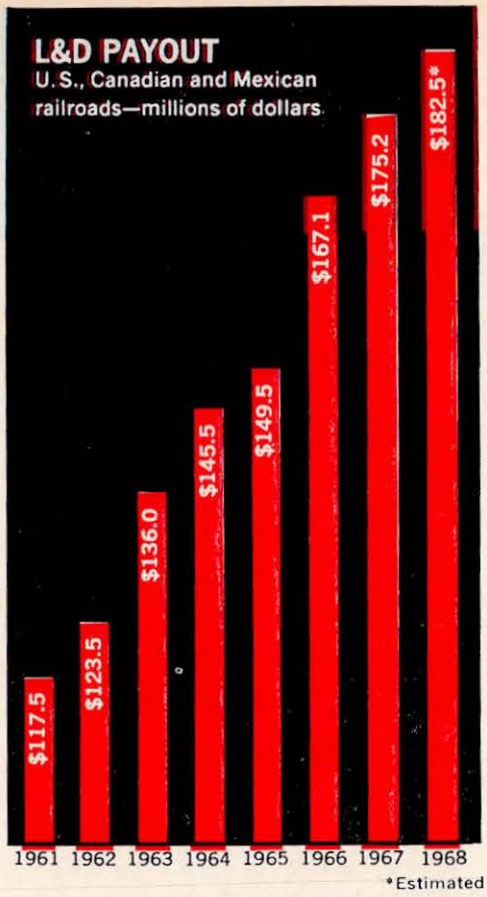
A. I think we will get the support, but I don't think it will come overnight. There are two determinations that have to be made. The ICC is working on one of them right now. This is a cost study of passenger trains that should be finished by June 1. Then we'll have to develop better yardsticks than we now have for deciding whether a train that cannot pay its way is really needed. When we have some specific examples of trains that the ICC says must be kept running even though they are incurring losses the railroads and their freight customers now have to absorb—I think we can bring home to our friends in the Administration and Congress the dimensions of this problem and the importance of accomplishing our program.

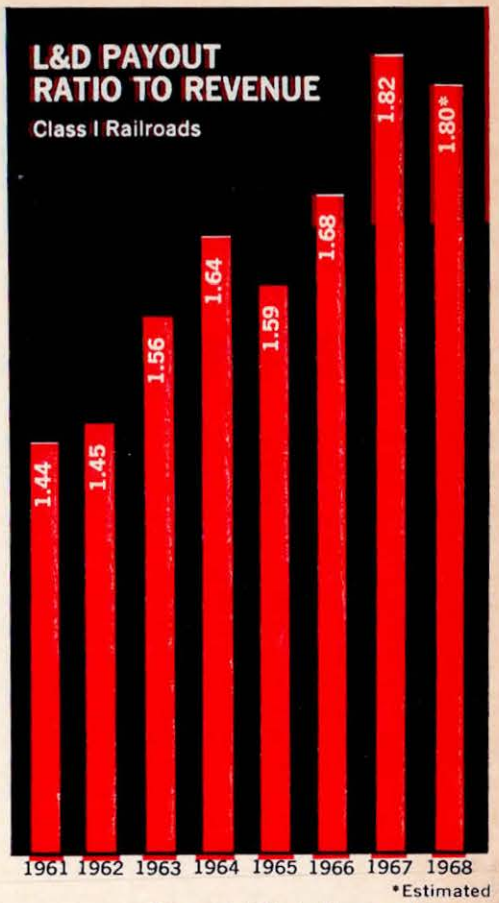
Q. The Chicago Tribune's reaction to this proposal was "Railroads line up at the trough." Others have viewed this as a surrender by the railroads to the idea of government-subsidized transportation. How do you reply to people like that?

A. We've been plugging for many years for equal treatment of all forms of transportation. We've pushed for compensatory user charges for some of our competitors who are indirectly subsidized. We're going to continue to do this —and, if we use government facilities we would expect to pay user charges. I suppose there are some who see our passenger train proposal as a first step toward nationalization.

But that's hardly the case. In fact, it could help avoid nationalization. After all, subsidies to other transport modes haven't led to nationalization of those industries. On the contrary, it's given them the added money muscle they

(Continued on page 81)





L&D: THE BATTLE CONTINUES

Improvement in the war against loss and damage is small. The slight success is based on industry-wide acceptance of education programs. Current emphasis is on proper loading practices.

There may be a small bright-spot in the 1968 rail loss and damage picture. That is, if you consider claims payment of $1.80 rather than $1.82 per $100 of freight revenue a small bright-spot.

That's how the final 1968 payout ratio could look for U. S. Class I lines, according to an Association of American Railroads estimate. The actual figure will be available sometime after May 1.

If the estimate holds up, 1968 would mark a slight downtrend for ratios that have grown almost steadily since 1961. The last improvement was a five-cent (per $100) drop for 1964-65. But that was followed by a nine-cent rise for 1965-66 and a 14-cent rise for 1966-67.

The dropping ratio can be credited partly to rising revenue, about 5% for 1968. But higher volume increases the risk just as much as it makes the ratio look better.

The small bright-spot, however, doesn't mean smaller payout. The yearly total lost on claims continued to grow. While the final total isn't available, U. S. Class I railroads could wind up giving an estimated $175 million back to customers for 1968 claims.

But even here there's a little brightness. While the 1968 payout would be the biggest ever, the rate of increase would be down from the two previous years—about 4.9%, compared with 5.3% for 1966-67 and 6.9% for 1965-66.

What small improvement has come can be traced mainly to the industry-wide acceptance of specific education in loss and damage prevention. A variety of programs are under way to show rail personnel—and shippers—all the angles.

In most cases, the emphasis is on loading, which now is widely considered the crucial phase of distribution. Loading practices and load-protective equipment are getting today's major stress.

The hoped-for outcome of most of the industry's programs is a force of professional agents who can quickly and precisely spot damage causes. These are the same men on whom the industry's prevention strategists depend for their raw material.

Right in line with the trend is Chicago & North Western. The railroad's anti-loss and damage system is rapidly taking new form—the muscle of discipline, the face of a schooled agent, and the skin of a computer. The road's program is described on page 34.

C&NW department, first in the industry, zeroes in on L&D

Other railroads are already taking an interested look at North Western's approach. It aims to get the most out of both men (specially trained field inspectors) and machines—data-processing.

Chicago & North Western's anti-loss and damage system is taking new form —the muscle of discipline, the face of a schooled agent, and the skin of a computer.

The form follows a new, maximum-use personnel plan to bring out the best in the railroad's men (RA, Feb. 17, p. 33). Under that plan, the entire accident and loss prevention department, a unique North Western creation, is being honed through education and computerization.

The result will be counter-moves based on thorough, data-processed investigation, whether the target is accident, injury or loss and damage.

Though the A&LP department has existed for two years, the first emphasis was on accidents and injuries—with some immediate success (RA, March 25, 1968, p. 37). Since mid-1968, loss and damage has gained equal attention. But now, all areas are starting to reflect the new personnel push.

● **To trim a ratio.** So far as loss and damage is concerned, the push is needed to cut a payout ratio to gross operating revenue that Will D. Selman, director of freight claims programs, calls "nothing to brag about."

For 1968, North Western shows a payout ratio of 2.4%, compared with about 1.8% for the industry generally.

Though the 1968 figure is down from 2.9% in 1967, Selman says C&NW really is just holding the line. For one thing, 1968 operating revenue was up from the year before, and that accounts for some of the lower ratio.

From 1968 revenue of $250 million, the railroad paid $6.1 million in claims. From 1967 revenue of $218 million, $6.3 million in claims was paid.

For another thing, the railroad handles a high percentage of traffic that both starts and stops on other property (overhead), or does one of those things. Only half the company's traffic is under its full control, with on-line origin and destination.

"No railroad's going to solve all its problems alone. We're happy that other railroads have shown interest in our program, and that some have asked to send their men to our inspection courses. We'll accommodate them as soon as we can," Selman says.

● **The muscle.** The fibre of Selman's activity is discipline that draws men up to their full potential.

Robert W. Russell, vice president-personnel, whose jurisdiction includes A&LP, says: "We are hoping to establish an orderly system for the isolation and recognition of specific damage problem areas. We are convinced that only by applying the discipline of an orderly and carefully organized system will we be able to utilize our abilities most efficiently."

Immediately involved are the railroad's field inspectors. Seventeen men have finished a 30-day training course constructed to assure the field quality of prevention work in all major areas.

According to Donald L. Nelson, manager of C&NW field inspection and property protection forces. "The need is clear for a group which can objectively observe, report and suggest corrective procedures to our line managers in the field. And that's what we're trying to produce, an expert in quality control responsible for the quality of the prevention in his territory."

For full results, Nelson says a force of about 25 men is needed. Four of these are senior inspectors, each responsible for a geographical region which cuts across each of the railroad's divisional lines. The training is set for completion by late 1969.

Nelson emphasizes that an inspector is not an enforcer. The goal, rather, is to supply the best source of assistance for line managers. After training, the field inspector returns to his territory with a new advisory competence.

They return with new potential for advancement, too. As Russell says, "It really elevates their ceiling. It's a built-in management development program. Inspectors can move up first to analysis jobs, and then into planning."

The training covers train accident, personal injury, freight damage prevention, freight claim disposition, all treated as separate subjects, but interrelated as a total accident and loss prevention concept. Great emphasis is placed upon the day-to-day relationships with the other departments on the C&NW.

The subjects are covered in detail. Freight damage prevention, for example, includes such equipment as impact registers, still and movie cameras, video recorders and radar loading methods according to commodity and type of rail car, and field participation trips.

Trainees get a 150-page manual that presents objectives, blocks of instruction for each subject, and even the lesson plans of the instructors.

● **The skin.** Another thing the inspectors learn is the use of the computerized exception report in the disposition of freight claims. By April, North Western will have its senior inspectors providing training to others. All of the railroad's 500 station agents will then know how to send in information in a new format utilizing a new exception report designed for computer input. The full system is to be operable by the end of July, Selman says.

The report training is set up according to eleven commodities that stand as North Western's most costly in terms of payout—$500,00 each, annually. Analysis will follow the same grouping.

From the analysis will flow recommended action that takes C&NW prevention full circle, right back to the field inspector, for implementation.

"The field inspectors are not only the eyes and ears of our prevention campaign, they're the arms and hands, too," Selman says.

Categories programmed included canned goods, household goods, paper products, grain, bulk grain, bulk other than grain, open-top loads, auto parts, perishables, fresh meat, and "all other" commodities.

Data fed to the computer will cover all phases of distribution—loading, rail movement, unloading. "Computers can show us damage that has been missed, in addition to helping us analyze damage we already know about," Selman points out.

By late summer, he adds, North Western should be able to start measuring results of the new operation. ■

How one supplier joined the war

Loading symposiums in west are sponsored by Signode.

CHICAGO SEMINAR: A demonstration of dynamic or impact testing of steel strapping.

In the war on loss and damage, how do you tap a supplier for more than his production of gear to protect loadings? One way is to appeal to his sense of pride. First you touch the fibre that makes him want his protective gear used the right way. Then you give him a group of users, actual or prospective, and let him tell them how his product works—if installed and maintained properly.

That may sound like an ideal sales setup. It is, but that is another part of the reasoning behind a program moving through the Western states against the rail industry's worsening L&D payout condition. Through the structure of the Western Weighing and Inspection Bureau, Signode Corp. of Chicago is trying to educate carrier, customer and Bureau personnel—by a series of carloading symposiums based mainly on demonstrations of Signode protective equipment.

While the sales potential is clear, it seems an appropriate compensation for the time and expense involved in supplying the men and materials for a program that is booked on a near monthly basis through the rest of 1969.

● **Results are evident.** Just as clear as the sales angle, however, are the program's results for L&D prevention, according to Robert C. Kniewel, WWIB manager, who got Signode to move on a wide scale. The project follows an obvious need, already shows benefits, and, for a bonus, is helping improve rail-shipper communication, Kniewel says.

"In this business you simply never learn everything," he adds. "Loading practices are always changing. Carloading is an inexact science that must be constantly reviewed.

"We can see the results of the seminars in the execution of reports where our people are using things they learned concerning what's at fault in damaged shipments. They are becoming fully aware, for example, of what happens if you don't block properly.

"It's a golden opportunity for everybody concerned to get a free education. Shipping people can see their problems, they can go to somebody and learn, at somebody else's expense. That goes for railroads, too. More of these meetings would continue to engender closer cooperation between customer and carrier."

WWIB representatives and railroad men attend the first day of Signode's seminar. Shippers come for the second day. They all get an experience with "no boring long periods," says Joseph F. Beckman, Signode sales vice president. He adds that acceptance of the symposiums has been "most gratifying." Personal letters and critique sheets from the registered participants have been "almost unanimous in their endorsement of the value and need for this type of carloading education effort," Beckman says.

● **Full package.** Designed to provide a fully packed course in the basic principles of carloading, the seminars include lectures, movies, slides and real-life demonstrations in rail cars and on sites provided by railroads operating in the area of each symposium.

For example, Beckman explains, "Signode's grain or retaining doors, retaining strips, and Avi-gard bulkheads are put up actually in simulated loads and piggyback trailers. In addition, background is provided on steel and non-metallic strapping and its function in material handling, packaging, reinforcement, and use for bracing in both closed and open-top freight cars."

In addition to proper loading through accepted methods and correct use of equipment, the job of damage inspection and reporting also gets attention in the symposiums—to improve communication, Beckman emphasizes.

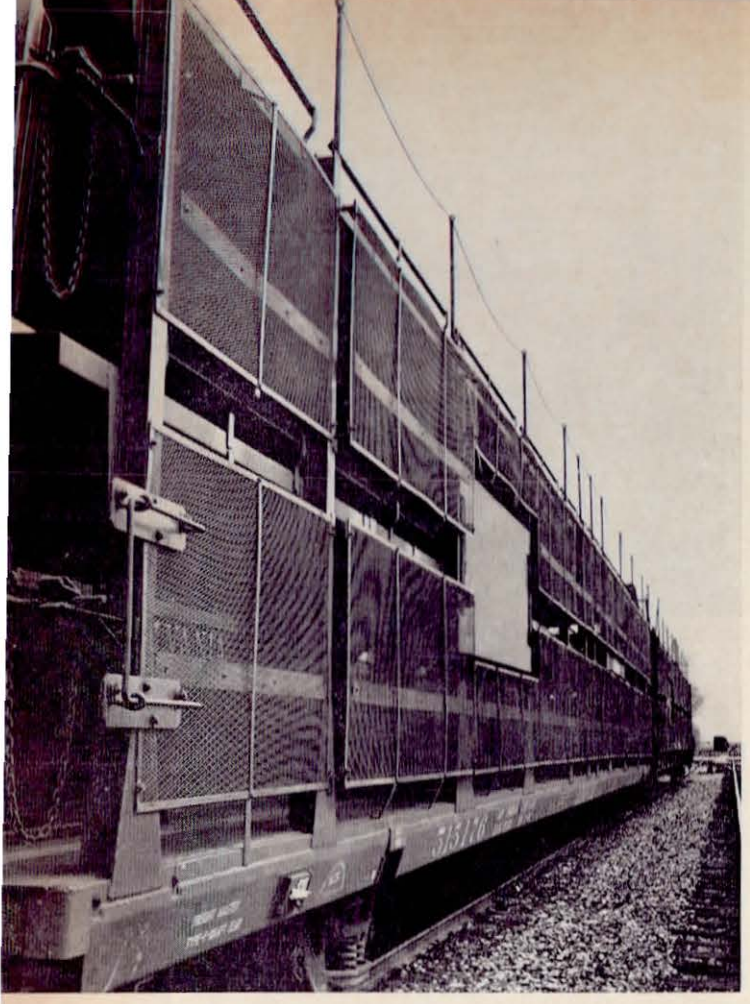
What does it mean to Signode? Beckman replies: "Possibly the most satisfying factor is the feeling of sincerity in being part of the ground floor of a new combined effort of carriers, suppliers, shippers and receivers to improve arrival conditions. Signode field representatives can evidence this interest at the seminars on the part of shippers and receivers. These representatives become the continuing means of specific problem solving at the local sources. Signode's efforts to train shippers and carriers to use our products correctly, efficiently, on a basis of proven carloading principles, evidences further our sense of responsibility for better shipping."

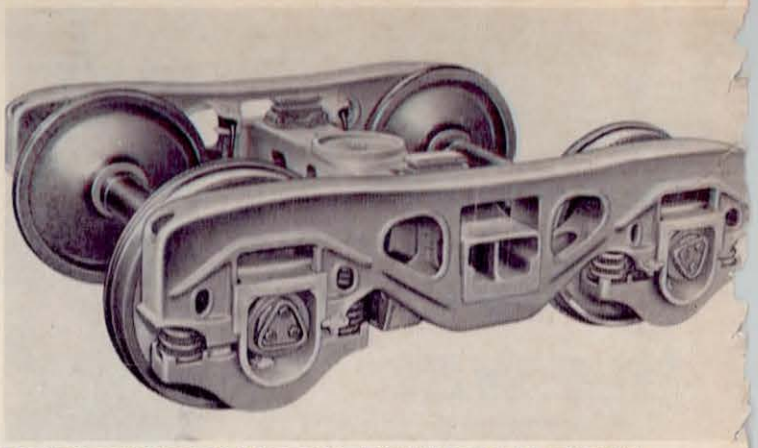
Much of the material for the seminars comes from Signode's sales engineering department.

● **Neglect is dangerous.** "Everybody is interested in carloading methods, but it's something that is terribly neglected," Beckman says. "Even though people learn the proper methods, they continue to skip nails here and there or to put on one seals instead of two. We want to make everyone cognizant of what can happen if proper methods are not used."

Beckman tries to start each seminar with a personal pep talk. Seminar instructors include H. F. Koehn, sales engineering manager, and Signode project engineers, equipment specialists and sales representatives.

The most recent seminar, number five in Houston, Tex., March 18-19, brought the total number of participants to nearly 1,500. With the exception of April, the rest of 1969 is set for seminars in New Orleans, Denver, Salt Lake City, Portland, Ore., Seattle, Los Angeles, San Francisco, Davenport, Iowa, St. Louis, Mo., Memphis, and Fort Smith, Ark. In 1970, the Southeast and East wil be covered, Beckman says. ■





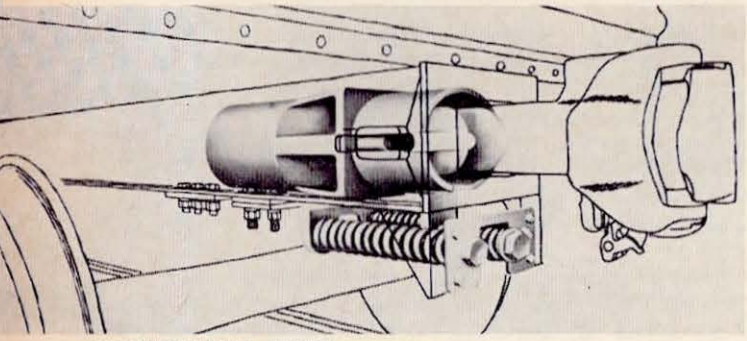
TRUCK CONTROLS LATERAL AND VERTICAL SHOCK

The Symington XL-70 trucks reduce unsprung weight and cushion ladings while they control lateral and vertical shock. The truck significantly dampens the effect of damaging shock forces on the structure of the freight car.

PROTECTION FOR AUTO-RACK CARS

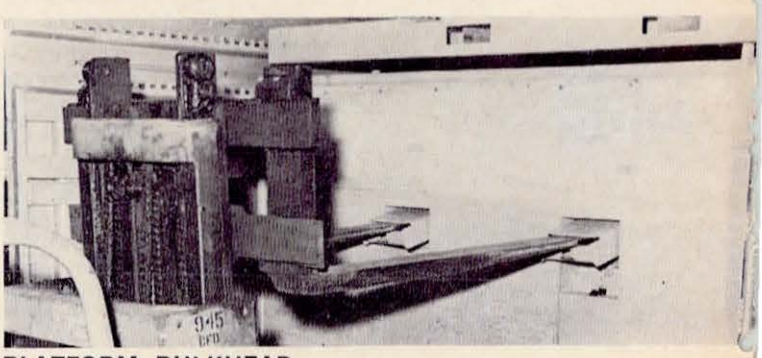
Rail shipments of automobiles arrive at destination protected against dents, glass breakage and pilferage in cars protected with these United States Gypsum Side-Protection panels. The panels are easy to apply and minimize cost for new and existing cars.

Some potent weapons in the



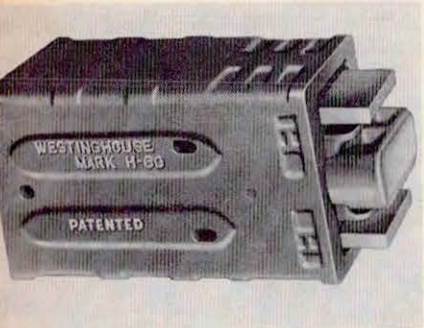
CUSHIONING UNIT

This type SP-E FreightMaster cushioning concept has 7-inch hydraulic travel. It installs into space required for a 24⅝-inch standard draft gear. Performance of the unit includes 9.25 mph at a 500,000-lb coupler force.



PLATFORM BULKHEAD

Equipco's "PDQ" platform bulkheads are used in combination for double decking and lading protection in freight cars. The bulkheads, which were originally developed for use in auto parts box cars, can be adapted for a variety of ladings.

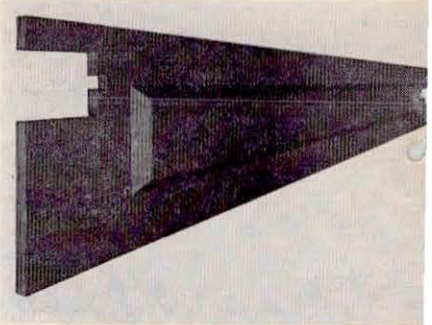


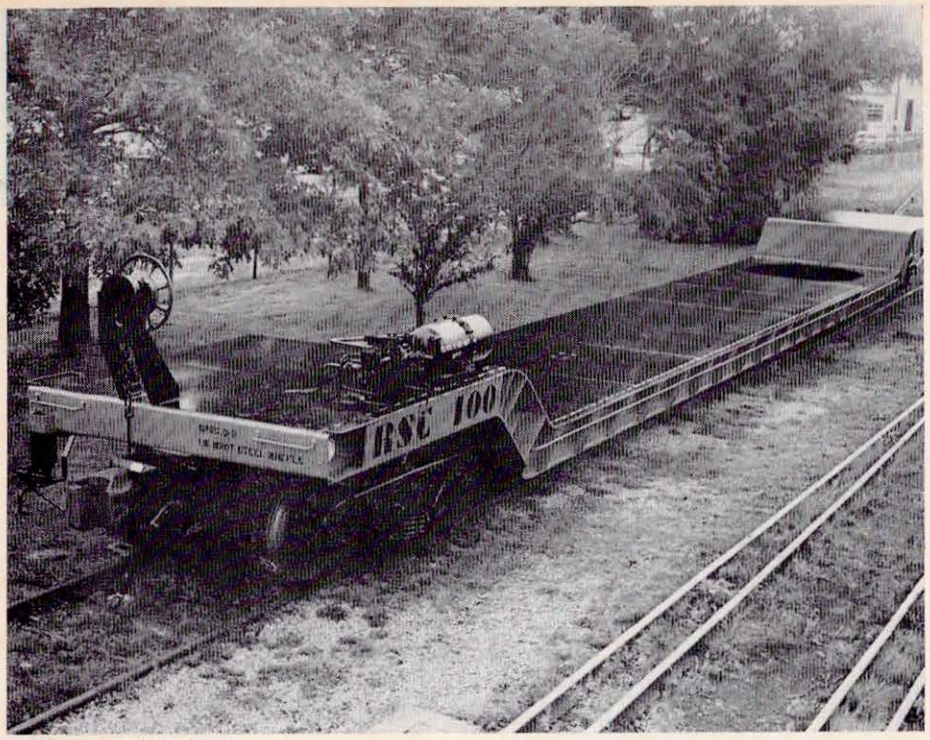
DRAFT GEAR H-60

Cardwell Westinghouse Co.'s hydraulic-friction draft gear Mark H-60 has great resistance to static pull. Under heavy buffing impacts in switching, the hydraulic element more than doubles the capacity of the H-60. Designed for all types of freight cars, it is self-contained and also pre-compressed.

NEW LADING BAR

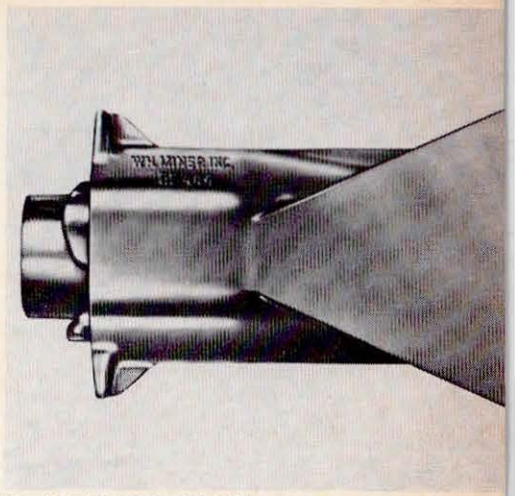
This lading bar has been designed for in-plant use by a major automobile manufacturer. Made by the Molded Fiber Glass Products Co., the lading bar consists of a plywood core completely encapsulated in hot die molded fiber glass reinforced plastic, which greatly increases the strength and durability.





SPECIAL FLAT CAR

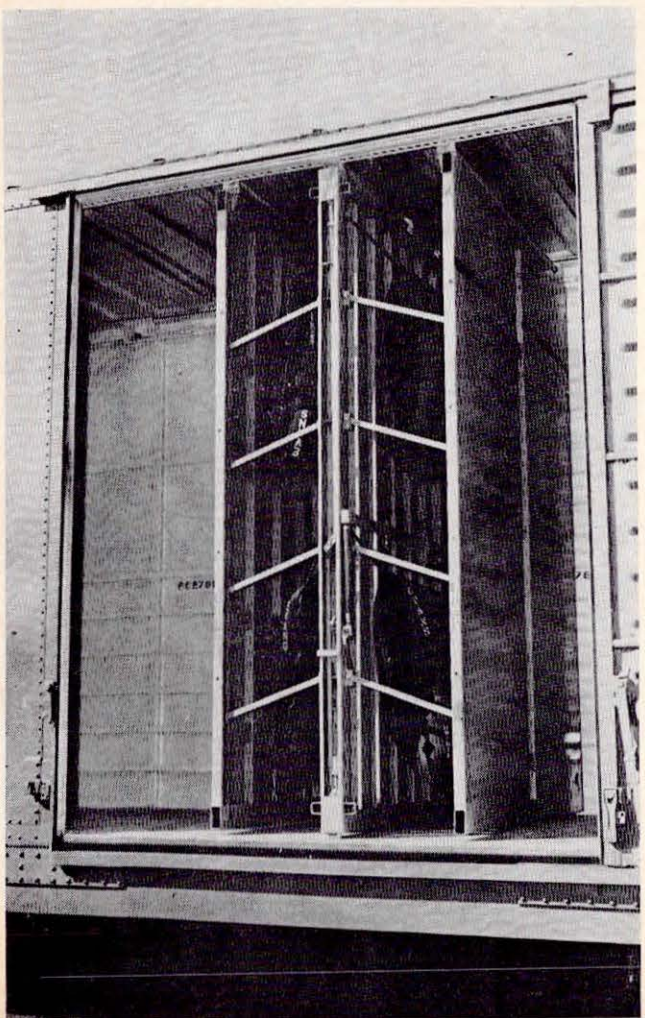
This 76-ft-long depressed flat car was specially built by Berwick Forge & Fabricating Corp. It will safely carry 70 tons of bulky boilers. Note the well near the rear of the car (at right in photograph). Building and modifying cars to customer needs is a specialty of this manufacturer.

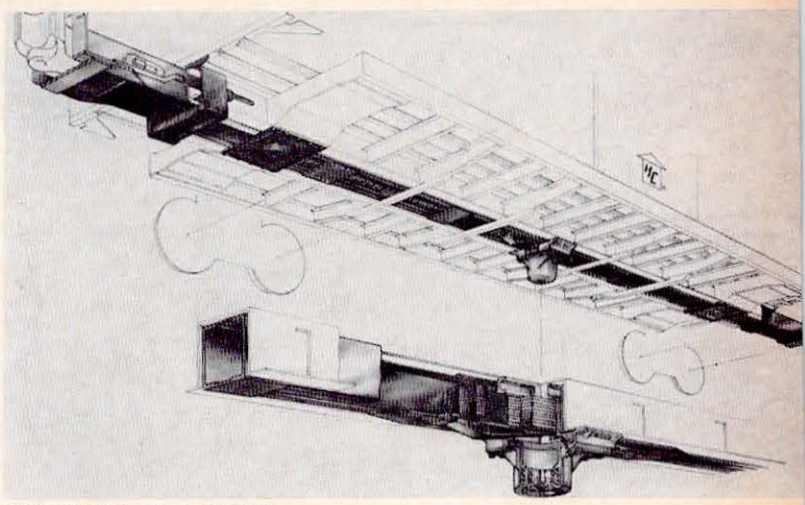


DRAFT GEAR RF-444

This Shock Buster draft gear incorporates W. H. Miner's friction-clutch design in conjunction with rubber cushions. It has been designed to meet or exceed AAR specifications for 24⅝-in. pocket installations. It develops 48,300 ft lb at 3.18 in. and a reaction force of 568,000 lb. The maximum travel capacity is 63,900 lb at 973,000-lb reaction force level. The unit weighs 272 lb, has a length of 22⅜ in., a width of 12½ in., and has a depth of 9 in. Shock Buster will give maximum shock protection to lading and car at normal speeds.

L&D-prevention arsenal



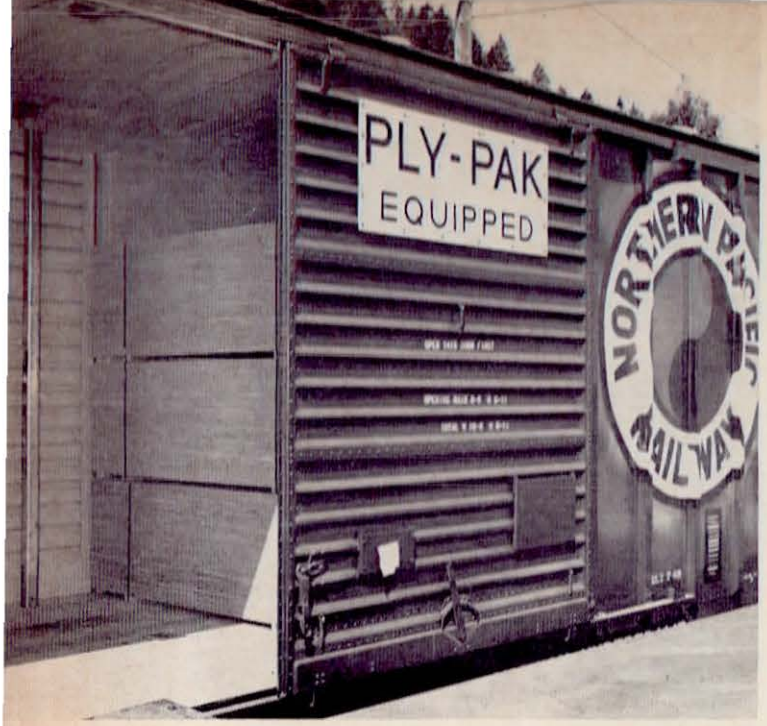


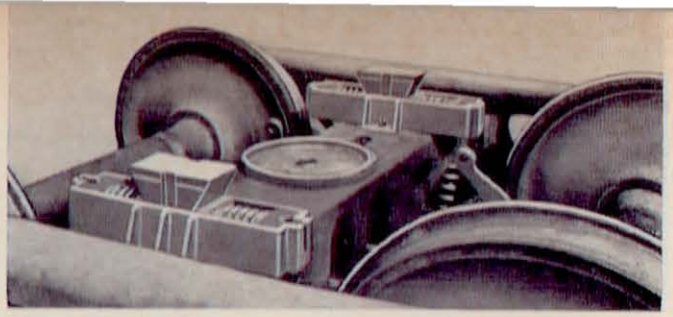
CUSHIONING SYSTEM

This Hydra-Cushion cushioning system combines a hydraulic cylinder with friction plates to multiply cushioning capacity at low oil pressures. Minimal maintenance is required, thus the dependability of lading protection is increased.

SECURING DEVICE

An Air-Pak bulkhead, placed in the center of a new high cube box car, is shown in its inflated position. By inflating this securing device, after car has been loaded, possibility of damage to lading is virtually eliminated.



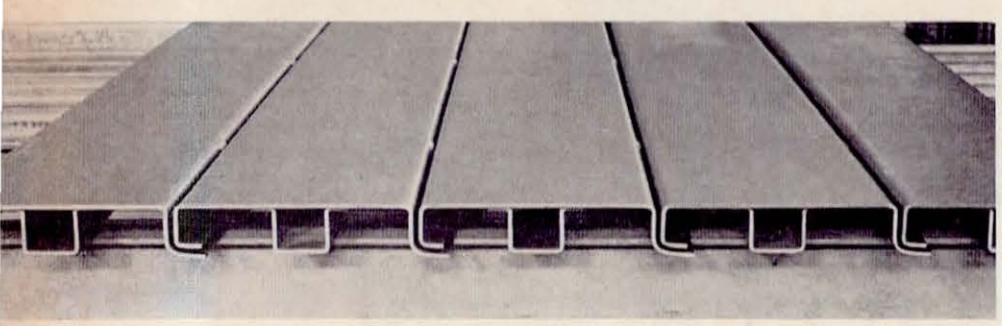


CAR STABILIZER

Unity NO SWAY side-bearing stabilizer has been developed to control freight-car stability. This equipment is designed to reduce harmonic rocking and swaying of cars, one cause of wheel lifting and derailments of high-capacity cars.

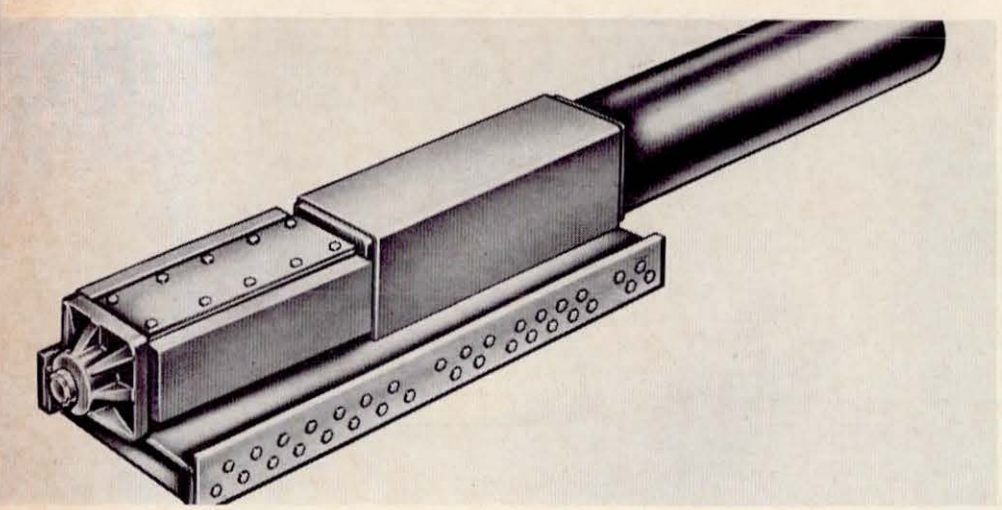
SPECIAL PURPOSE BOX CAR

Ply-Pak, made by the Transport Equipment Co. for box cars hauling panel products, provides damage-free shipments, low costs for loading and unloading, and cuts dunnage allowances. Estimated average dunnage per car weighs 350 lbs.



NAILABLE FLOORING

Armco's all-steel nailable car flooring offers a smooth, maintenance-free, damage-resistant car flooring. Armco flooring is a structural part of the underframe, hence it substantially stiffens and reinforces the entire car. Added to the flooring's true nailability, this stiffening of the car gives maximum protection to freight cars and their contents.



SHOCK CONTROL

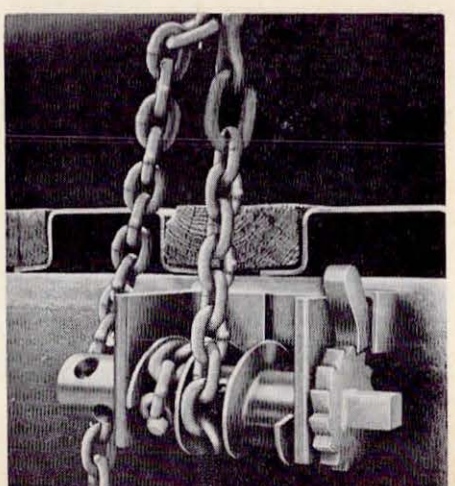
Keystone Railway Equipment Co.'s SHOCK CONTROL Model S.A., includes a fixed-sill stop, and is now self contained. Total applied weight of the unit, including all necessary parts, has been reduced to under 2,450 lb. This improved unit is simply designed. Its construction assures maximum performance and service life and keeps maintenance to an absolute minimum. The new device gives its users constant cushioning performance under all conditions.

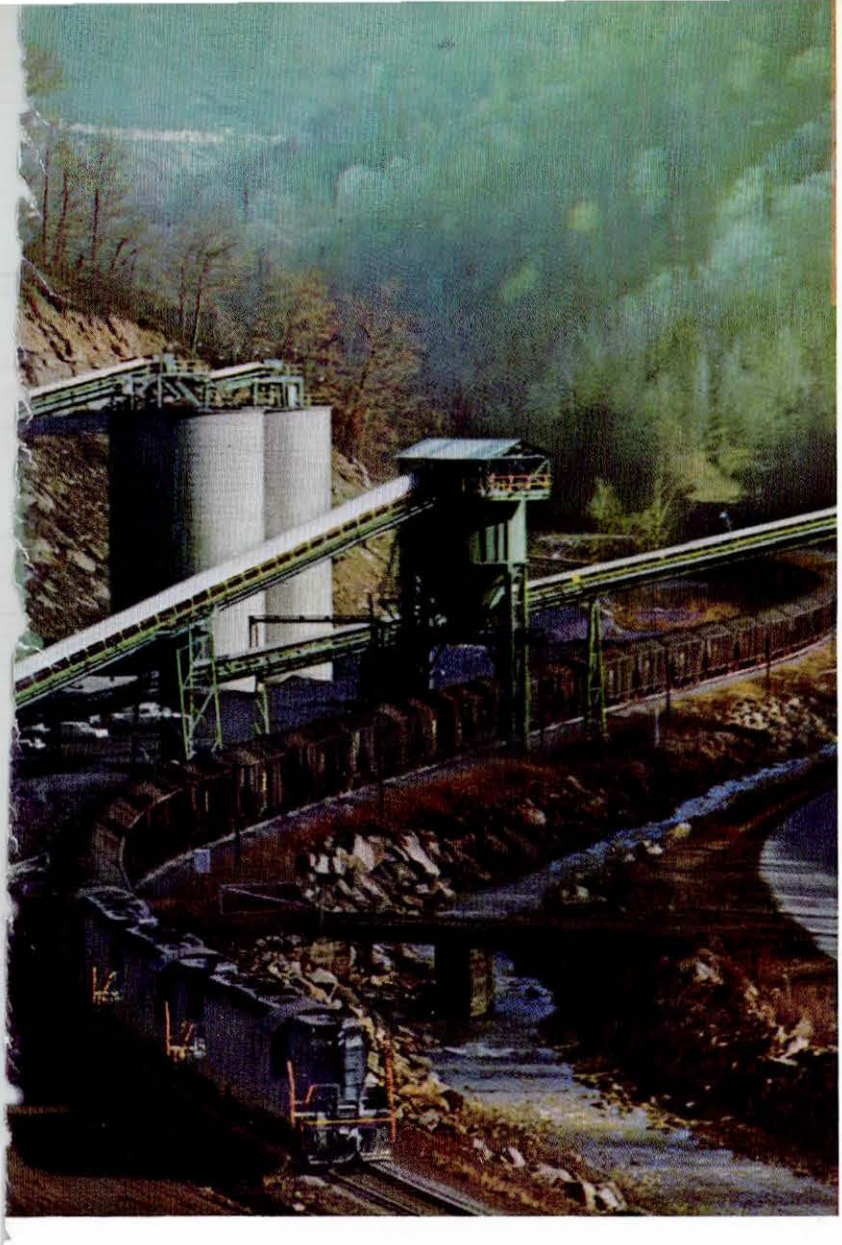
DRAFT GEAR NC-660

National Castings Division's NC-660 is a new rubber-friction draft gear designed for long life, high capacity and minimum wear. The gear includes a 3-shoe friction mechanism plus an enclosed box section cast steel housing. Assembled gear weight is 330 lb., excluding the front follower. The gear fits all standard yoke and car construction.

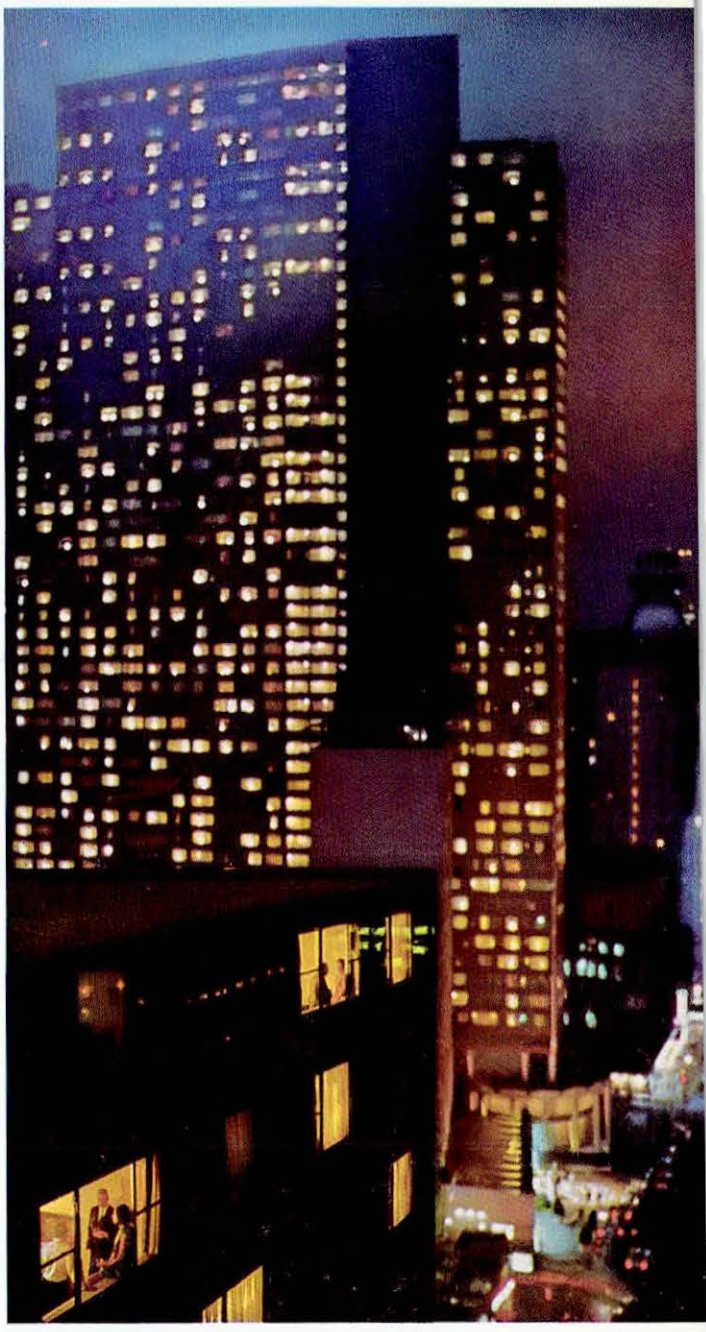
WINCH DESIGN

Tying down loads to flat cars or trucks with chain is faster and easier with this new helix winch from American Chain & Cable. The winch saves time in flat-car and truck loading and also protects the loads. Because the chain does not pile up, once it is secured by this winch, loads cannot come loose during transit. Frame design is flexible.





Unit trains – helping turn on lights all over America...



...and helping you live the kind of living you like at savings you like.

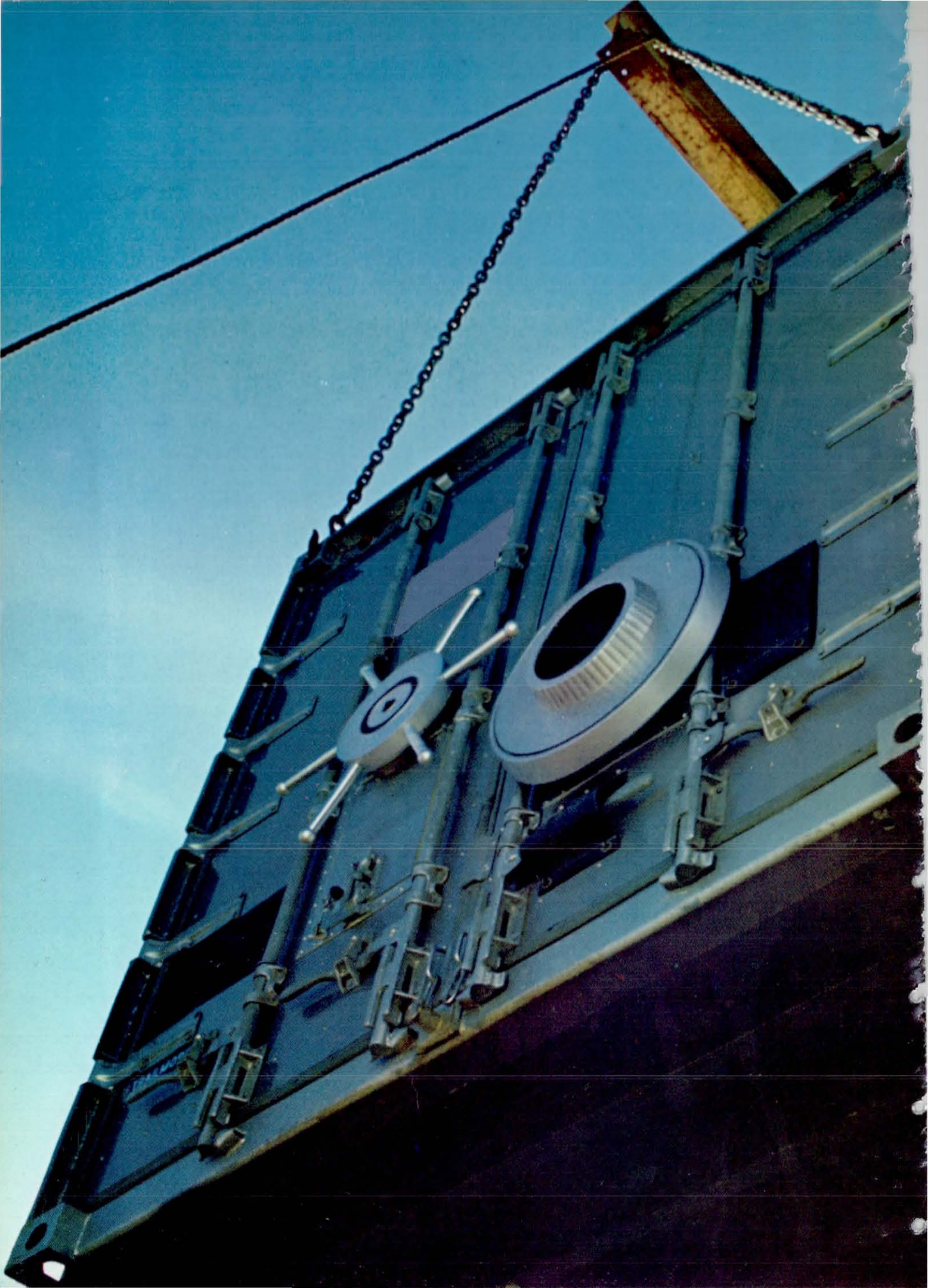
Unit trains are a new *rail* way of hauling thousands of tons of one thing—coal, ore, grain—from shipper to customer, back and forth without stopping. They cut costs, save you money. Unit coal trains, for example, save Americans more than $100 million a year on their light bills alone.

Unit trains are one of many reasons why average rail freight charges are lower today than 10 years ago...and why railroads are better able to meet your ever-growing transportation needs.

ASSOCIATION OF
American Railroads

GROW, GROW
BY THE RAIL WAY

1869 1969
GOLDEN SPIKE
CENTENNIAL



The big movable vault.

Trailmobile-engineered containers come close to being as pilfer-proof, breakage-proof, and weather-proof as Fort Knox.

First of all, our unique loop-frame construction gives our container the rigidity to stand firm under crushing loads. And our engineers make sure we exceed all USASI specifications.

Take our rear doors. On our 40-ft. container they're 1⅜-in. thick plymetal with two extra strength locks on each door. Each lock has heavy-duty lock rod bearings top and bottom. Each door has five steel hinges.

We're just as careful about protecting against water leakage, corrosion, and external damage to the container. And everything is Trailmobile-tested . . . your load can depend on it.

You just can't beat that combination.

We build them so well to help you lock up maximum container shipment profits.

Just as we help the entire load-carrying industry profit with our complete line of trailers, tanks and containers.

TRAILMOBILE means business

A Division of Pullman Incorporated

200 South Michigan Avenue • Chicago, Illinois 60604

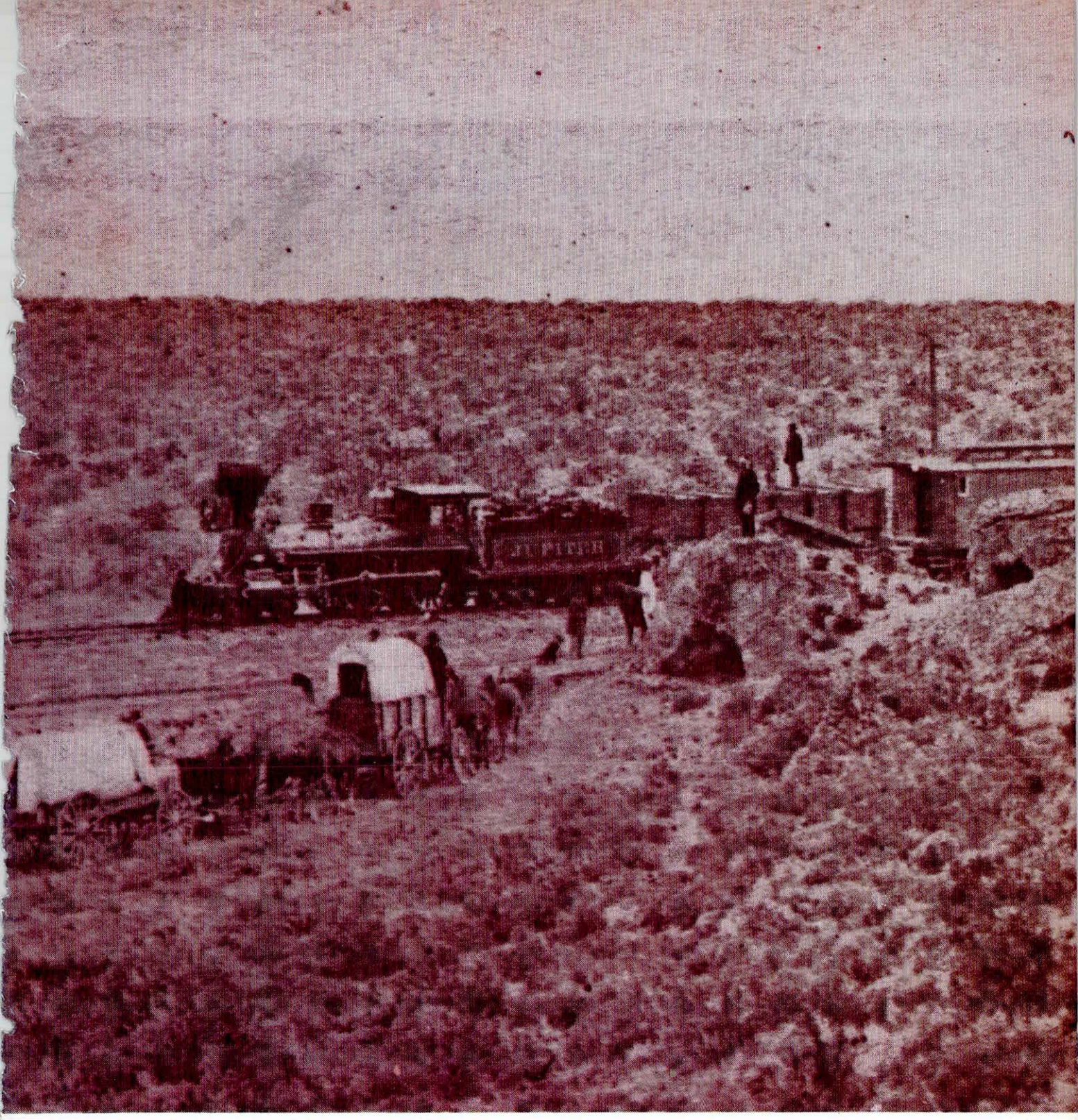
Suddenly, 100 years ago, there

Cecil B. DeMille would have loved it.

Here was California Governor Leland Stanford's special train headed east for Promontory, Utah. Headed west was one of the last wagon trains of emigrants bound for California. Two days later—on May 10, 1869—Stanford drove the golden spike to mark completion of the transcontinental railroad.

Linking East and West by rail was one of the great engineering feats of all time. Railroaders blasted their way through the Rockies, threw bridges across rivers and chasms, cut and filled enough earth to bury and rebury the Pyramids, beat off persistent Indian attacks.

What railroaders proved beyond their own skill and daring was the special virtue of the railroad idea itself. Governor Stanford's "Jupiter" and attendant cars look quaint, to be sure. But here was prefigured the future of volume transportation—terrific power and capacity packed into a narrow space, the low friction of steel



was a new way to go west

1869 1969
GOLDEN SPIKE
CENTENNIAL

wheel rolling on steel rail, the great savings of a multiplicity of towed vehicles, the efficiency of "guided movement" (today, this advantage has escalated: only the rail-guided train lends itself naturally to automation), the economy of one "driver" up front. Here was a fit vehicle for building the west.

Today, the Iron Horse is still the best vehicle in sight for building the kind of volume transportation system America will need to hold her place in the world. That's the message of RAILWAY AGE's May 10, 1969 "Golden Spike Centennial" issue. It will be 1 part nostalgia, 10 parts exciting future: the next 100 years in railroad technology. You belong in it! Important extra distribution. Closing date: April 28.

Be part of the weekly excitement in **RAILWAY AGE** *the transportation weekly*

Why do cars built with Cor-Ten Steel stay in service far longer than ordinary cars?

USS COR-TEN High-Strength Low-Alloy Steel not only has extraordinary resistance to atmospheric corrosion and normally holds paint up to twice as long as carbon steel, but also is 40% stronger than regular carbon steel. It gives cars the stamina to withstand continuous punishment and to set records for uninterrupted service.

USS COR-TEN Steel can be used (1) in the same thicknesses as carbon steel to provide much greater strength and far longer service life with the same payload, (2) in thinner sections to provide equal strength and service life with a maximum reduction in weight and increase in payloads of several thousand pounds per car, or (3) in

intermediate thicknesses to provide, at the same time, a lesser but worthwhile increase in strength, payload and service life.

USS TRI-TEN Steel, another relatively low-cost weight reducer, has excellent resistance to fatigue. USS EX-TEN Steel's favorable strength-to-cost ratio makes it the biggest carbuilding bargain around. For especially rough impact/abrasion applications, use USS "T-1" Steels.

These special steels can increase the life and efficiency of the next freight cars you buy or lease. For more information, write United States Steel, P.O. Box 86 (USS 5989), Pittsburgh, Pennsylvania 15230.

USS, COR-TEN, TRI-TEN, EX-TEN and "T-1" are registered trademarks.

USS United States Steel

In 1898 your problem was how to join two cars. In 1968 it's how to separate two million.

When railroad people decide to standardize something, you just know it's important.

After all, they've only done it a few times in the last 100 years.

The first in 1887, when they agreed on the gauge of the track.

The next was in 1898, when they decided to couple all cars the same way.

After that came air brakes, in 1907.

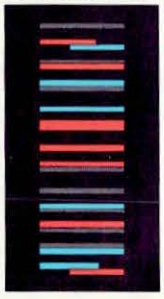
We take them for granted now. But these standards revolutionized railroading by making free interchange possible.

But some 2 million freight cars operate across North America now. And the big problem is separating your cars from the other guy's, and figuring out where they are.

So the Association of American Railroads established another standard: KarTrak* Automatic Car Identification System.

It consists of a coded label, a trackside scanner, and a decoder.

Among other things, it lets you keep track of your cars so you can use each one more often, minimize human error, and keep more accurate per diem accounting.



You'll handle more traffic. Deliver on time. Schedule more efficiently. And operate more economically.

By 1970, this label should be on every car in the country.

It may not increase the speed of your boxcars, but it'll sure get them back to you a lot faster.

Sylvania Information Systems, Commercial Electronics Division, Bedford, Mass. 01730.

SYLVANIA
A SUBSIDIARY OF GENERAL TELEPHONE & ELECTRONICS

*TRADEMARK

TRAINLOAD of new all-white-on-the-inside, pipe-carrying gondolas pulls out of Youngstown, Ohio, bound for Houston, Texas.

White paint cuts pipe damage

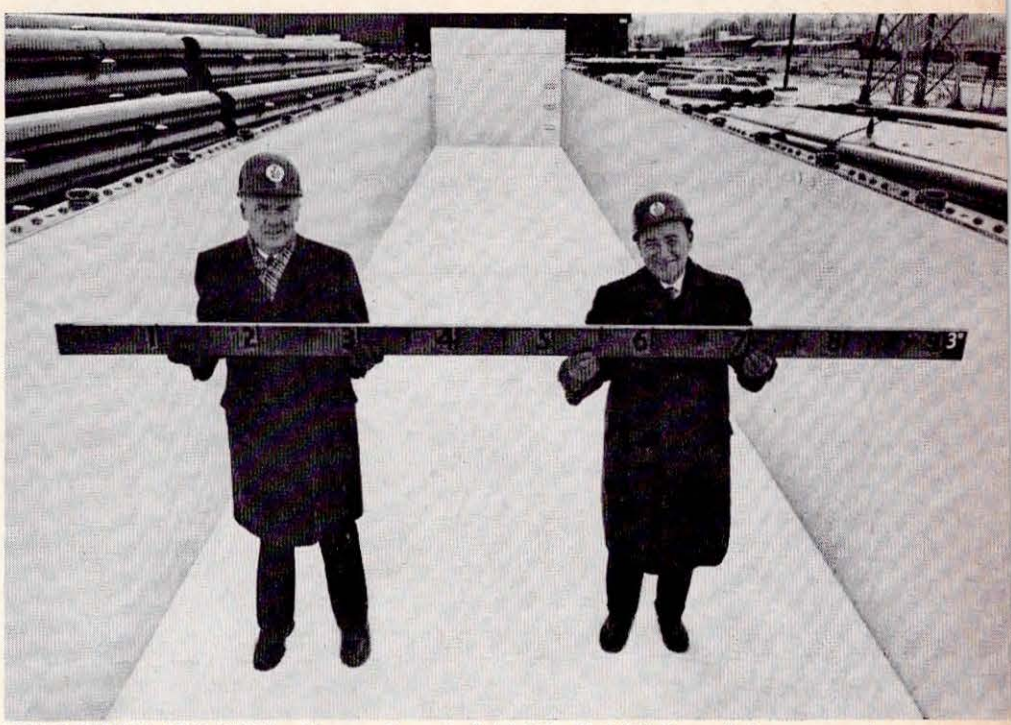
Painted interiors make it easy to see car sides and bottoms.

Some clouds have silver linings . . . some new gondolas have white interiors. Chesapeake & Ohio/Baltimore & Ohio is now introducing a fleet of pipe-service gondolas which are painted with a light-reflective, off-white on the inside to make handling long tubular and structural shapes simpler and safer.

● **Greater visibility.** "We have done this to make it easier for workmen to see the sides and bottoms of cars when loading and unloading steel shipments —particularly at night," explains Murry Campbell, C&O/B&O market manager for iron and steel. "For years, crane operators have been wrestling with the problem of lowering heavy steel pipe safely into gondolas whose black interiors made it difficult to gage distance. This slowed operations and frequently resulted in pipe damage."

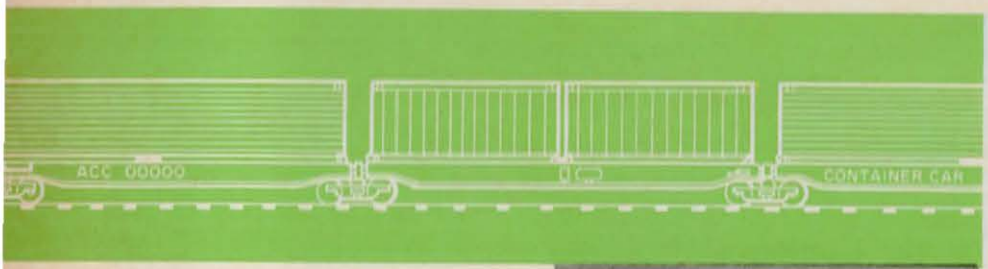
Over the past two years C&O/B&O has invested $63 million in steel-carrying equipment. The latest additions—the gondolas with the off-white interiors—were turned out by Greenville Steel Car. They are, says C&O/B&O, among the widest 65-foot gondolas ever built. With a 9-foot 3-inch interior width, the capacity is 3,332 cubic feet on 70-ton trucks. The 100 cars have wood-lined bulkhead ends which prevent damage to pipe ends if loads shift.

Currently, another 100 gondolas of 52½-foot length are being built by the C&O/B&O shop at Raceland, Ky. All these cars are also to be serving the steel industry by the end of this month. As in their longer contemporaries, hardwood lines the ends.



LONG, WHITE AND WIDE—Murray Campbell (right) C&O/B&O market manager for iron and steel, and Donald S. Day, Youngstown Sheet and Tube Co. vice president and general traffic manager, hold 9 ft. 3 in. yardstick indicating 65-ft.-long car is widest of its kind on U.S. rails. The railroad has ordered 100 of the cars.

● **Cooperative effort.** Twenty loads of line pipe produced by Youngstown Sheet & Tube constituted the first shipment in the new 65-foot gondolas. This tubular material moved from Youngstown, Ohio, to the Texas Power & Light Co. in Houston. The new gondolas' designs are the result of joint efforts of the C&O/B&O marketing, product development and mechanical departments, in cooperation with steel industry traffic experts. In addition to pipe, the cars will carry structural steel, steel bars, wire and roll mesh. ■



ARTICULATION makes possible cars (above) consisting of two, three, or more units. The connector (right) welds to center sills of adjacent units, rests on center plate of truck.

Connector may solve long-car problems

In the face of AAR restrictions limiting individual freight-car lengths to 89 feet 4 inches, American Steel Foundries is talking of 167-foot auto rack cars and a piggyback flat capable of transporting three or four 40-foot containers.

Key to this new concept is articulation. Two, three, four or more carbody sections would be joined to form a single car. To achieve this, ASF has already produced an articulated connector which will handle 70- or 100-ton cars. The first such unit is now on test in an articulated hopper car (RA, Feb. 24, p. 7). ASF engineers are confident that such a connector could also perform reliably in even higher capacity cars.

● **Concept revived.** Carl E. Tack, ASF senior vice president, points out that articulation is now new. It has been on and off the drawing boards many times over the years and several articulated cars have appeared on the railroad scene in the past decade. ASF feels that the time may now be right and that its connector will send cars up to lengths of as much as 200 feet.

Unlike some of the earlier connectors, the new design rests on the centerplate of a truck which is located between, and supports, the ends of two units. While some other articulation concepts did reduce the number of couplers, brake systems and other parts, there was not a major reduction in running gear components. While articulation, according to Tack, can cure some of today's long-car ills and make possible lengths never before attempted, it would be prudent to limit the lengths of the individual units to perhaps 60 feet. Otherwise, he warns, there could be a resumption of the very same problems which now plague non-articulated long cars.

● **How long?** Length has created many design and operating problems in recent years. As cars grew longer, truck centers were increased and ultimately carbody width had to be cut to assure sufficient clearance on tight curves. If trucks were not spread, overhang at car ends became so great that couplers could not be given sufficient lateral swing to prevent derailment or coupling difficulties on sharp curves.

The new ASF design is similar in principle to an articulated connector produced by ASF-licensee English Steel Castings for auto-rack cars. Tack explains the differences: "In England 1,000-ton trains are considered big ones; in America we talk in terms of trains hauling upwards of 5,000 tons. Obviously, here we had to think about a design which could withstand extremely high forces. And unlike the British connector, which can have some play in it, ours would have to fit snugly to eliminate wear in its parts."

● **Not completely rigid.** The connector is designed to be welded to the center sills of adjacent units, also being braced to structural members. While wear does dictate that there should be as little clearance as possible within the connector, it cannot be completely rigid. There is provision for vertical angularity in excess of 8 degrees in each direction, such as might be encountered at the articulation point of a car entering or leaving an elevated coal dumper. It will also traverse a curve of 150-foot radius even if car geometry would otherwise prevent such an operation. The fully assembled connector installed in the hopper car currently under test is approximately 2½ feet long, 6 inches wide and fits into the standard truck bolster center plate.

The prototype connector in the experimental hopper car has undergone curve negotiating and impact tests. Further work at the AAR Research Center in Chicago is being conducted to confirm the actual operating results. Exhaustive dynamic and static tests on the new connector itself are scheduled by ASF engineers. Although the complete connector weighs less than a pair of couplers, yokes and draft gears, it is actually up to 2½ times stronger. Tests have shown it capable of withstanding draft forces of 600,000 pounds and buff loads of 1,250,000 pounds. There are six parts in the assembly.

● **Shape of things.** Tack predicts three-section auto-rack cars, perhaps exceeding 180 feet in length with only 18-inch gaps between the sections. Because there would be no danger of passed couplers between such sections, autos could actually be loaded with a slight overhang over the rack ends. Non-removable bridge plates might be possible.

Articulation might have very broad application in cars handling containers. Perhaps movable bolsters could be installed in the decks of the articulated sections so that the containers could actually span the gaps between sections. The experimental hopper car where the connector is now being tested has an open body which allows part of the payload to be carried directly above the articulated joint, illustrating the ability to utilize space which never before could have produced revenue. ■

...another side of our business

When we deliver our products to you, our interest and responsibilities do not end there. Our representative is a specialist, skilled in the technology of our products. Regardless of your department, he is able to help you with technical advice at any time— your complete satisfaction is his deepest concern. That is why he works for us. Call him when you have a question. He'll respond promptly, courteously, efficiently. The number is 312-427-5051.

CARDWELL WESTINGHOUSE COMPANY

332 SOUTH MICHIGAN AVENUE, CHICAGO, ILLINOIS 60604, U.S.A. • TELEPHONE: 312-427-5051

INTERNATIONAL DIVISION SAME ADDRESS

Circle 19 on coupon page 69

MARCH TRAFFIC POLL

QUESTIONS

1. **Do you support the railroads' proposal for federal aid (up to the break-even point) for those passenger trains that the railroads are required to operate at a loss?**
   - **29... Yes; the government should assume the loss.**
   - **3... No; the railroads should absorb the loss.**
   - **34... No; trains that can't pay their way should be abandoned.**

2. **Do you see this proposal as:**
   - **20... A milestone on the road to nationalization.**
   - **14... One way to forestall nationalization.**
   - **32... Not important in this respect.**

3. **Would you support the railroads' proposal in letters and/or talks with your own representatives in Congress?**
   - **25... Yes.**
   - **41... No.**

Shippers split on passenger aid

Is subsidy the answer to the passenger-service deficit? Or should money-losing trains simply be be abandoned? The freight customers have their say.

When railroads go to Congress this year to ask for passenger-train subsidies, they can count on substantial support from their freight customers—especially from those shippers who feel that freight is now picking up the tab for deficit passenger operations. Twenty-nine of 66 leading shippers replying to Railway Age's March Traffic Poll approve of the railroads' decision to seek federal aid for trains that operate at a loss (RA, Feb. 24, p. 11). Nearly all of these are willing to actively support the industry's quest for subsidies.

Slightly more than half of the responding shippers reject the subsidy concept—not because they think railroads ought to continue to shoulder the burden (only three of 66 took this position), but because they think that those trains that cannot pay their way ought to be abandoned.

Despite the slight edge given to the "no" vote, the shipper response on the whole may be interpreted as encouraging to the proponents of federal aid, considering (1) the essentially conservative nature of the shipping community and (2) the fact that the railroads' proposal has not yet been explained in great detail. A careful study of replies to the March poll suggests that more shippers will support the industry's position if and when it is made clear that the railroads are not asking government support for the clearly-obsolete long-haul passenger trains of yesterday.

Says Wayne E. Hollowell, director of transportation for Avon Products, Inc., New York: "We would be amenable to supporting the railroads' proposal in any way possible if, after learning of their specific plans, they appeared to be in order. The degree of our support would depend upon the exact course of action planned by the railroads. Their approach must be progressive, analytical and not merely one of seeking subsidization."

One indication that shippers need to know more about the plan, and its implications, is provided by replies to Question No. 2. While 20 respondents feel that passenger subsidies could be the first step toward government ownership of railroads, 14 suggest that such aid could have an opposite effect.

• **The "yes" vote.** The feeling that freight shippers are today being saddled with the costs of money-losing passenger service is reflected strongly in the replies of those who support the industry's position.

"There's an equitable doctrine to the effect that he who reaps the benefits should assume the burdens," says Dwight L. Koerber, executive secretary of the Coal Traffic Bureau, Pittsburgh. "Here, the intended beneficiary (of continuation of unprofitable passenger service) is the public—not the railroads and not the carload shipper who must eventually pick up the loss. Certainly coal cannot take any more freight boosts. To continue to saddle the railroads with increasingly heavy passenger burdens in light of mounting operational costs will only bring them nearer to nationalization."

"Most railroads have no place to make up passenger losses except on freight," agrees Joseph A. Fredrick, traffic manager of the Warner Co., Philadelphia. "I do not think that shippers should be expected to subsidize a non-paying service which the railroads cannot correct."

"Those who pay freight charges should not subsidize passenger trains," echoes O. B. Wynn, traffic manager, Ray-O-Vac Division of ESB, Madison, Wis.

Archer G. Milligan, general traffic manager of Sperry and Hutchinson Co., New York, is another who suggests that the requirement to operate deficit passenger trains "hurts the ability of railroads to perform vital freight services at reasonable cost."

• **The public interest.** The effect of deficit passenger operations on freight service is not, however, the only con-

BARTLETT

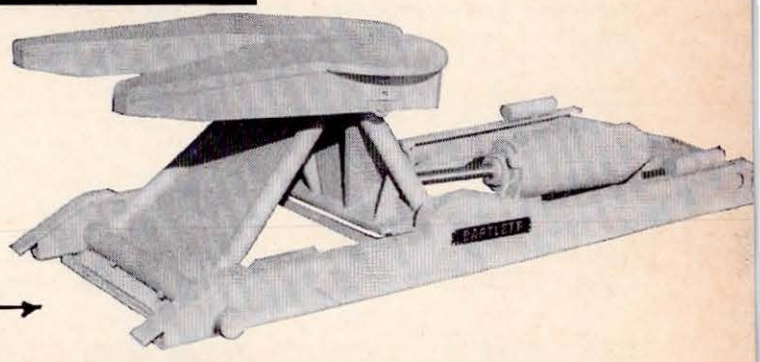
PIGGY-BACK
FISHY-BACK
HYDRAULIC LIFTING
5th WHEELS
Cuts Spotting Costs 2/3

Most Efficient and Economical Hydraulic 5th WHEELS MADE!

M60

LIFTS 50,000 LBS.
FULL 14" HIGH

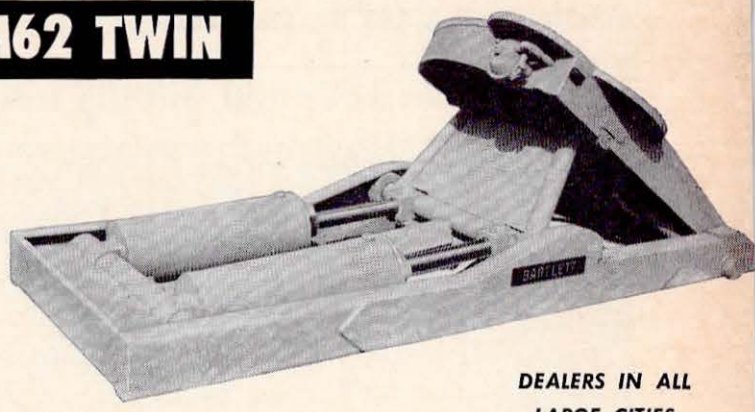
- Alloy Steel Construction for Longer Life
- Kit includes Frame, 5th Wheel, Air Jaw Controls
- Simplified Mounting; all instructions furnished
- Hundreds Still in Use after 15 Years' Service



M62 TWIN

LIFTS 100,000 LBS.
14" HIGH

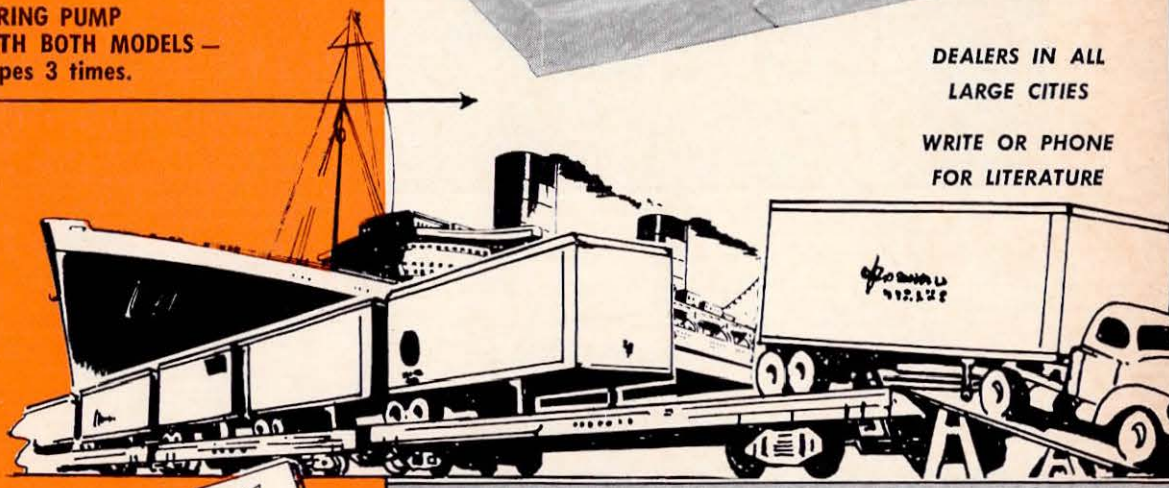
- Designed for Heavy Piggy-Back, Fishy-Back and Interplant Spotting
- May Be Combined with Stanchion Hook-ups
- Heaviest Wheel Made — WILL STAND PUNISHMENT
- STURDY ROLLER BEARING PUMP NOW STANDARD WITH BOTH MODELS — Will outlive other types 3 times.



DEALERS IN ALL LARGE CITIES

WRITE OR PHONE FOR LITERATURE

Used by
All Major Railroads, Shipshore Loaders, and Truckers



Ask for new, complete hydraulic manual which includes parts list and servicing instructions.

BARTLETT LIFTING DEVICES
DIVISION OF

BARTLETT TRAILER CORPORATION
6830 W. 63rd ST.... CHICAGO, ILL. 60638
AREA CODE 312: 586-8200

"GOVERNMENT GUARANTEE AGAINST LOSS IS ESSENTIAL"

sideration of shippers supporting the federal-aid concept. The replies of a number of shippers voting "yes" on Question No. 1 reflect a widespread belief that railroad passenger service remains essential, in some form, in the public interest.

Says Allen K. Penttila, director of traffic and transportation for the Evans Products Co., Des Plaines, Ill.: "Sometime in the not too distant future such [passenger] trains will supplement and complement air travel and highway travel as well as becoming a part of an expanding rapid transit system. From a public standpoint I believe providing of such a service, even though subsidized, will be cheaper and more convenient than a continued expansion of roadways between metropolitan centers, where past experience has shown that growth of automobile traffic always outstrips the capacity of the roadways."

Another Evans Products executive—Traffic Manager W. R. Hart of Portland, Ore.—feels that subsidies might not have to be long-lasting: "I believe that good, economical, fast, comfortable rail transportation will pay its own way in time."

Arthur C. Roy, general traffic manager of Pennsylvania Glass Sand, Pittsburgh, takes the position that "passenger service cannot be abandoned." He suggests: "A review should be made by a competent board of knowledgeable transportation people as to costs that can be attributed to passenger service —then the deficit, if any, can be government guaranteed . . . Our national defense requirements make passenger service and equipment necessary. We cannot maintain it on a stand-by basis; it must be used. There just aren't enough planes to take care of our needs in a national emergency, and equipment cannot be built quickly. Mass transportation and defense requirements make government guarantee against loss essential. Private capital should not sustain this loss, if any."

A supporting argument comes from John A. Faller, general director, purchasing and traffic, Libby-Owens-Ford Co., Toledo: "Anticipated population explosion and increasing need for mobility will increase the importance of continuing in existence passenger-train service. We're already reaching the saturation point in congested airways; passenger service on the rails, eventually, will be the only answer to the nation's problem."

And from Thomas L. Lundeen, traffic manager of the Youngstown Steel Door Co., Youngstown, Ohio: "High speed, economical frequent rail passenger service is a public necessity. I realize this type of service would attract some passengers now using airlines for distances up to, say, 500 miles, but I believe the main diversion would come from our highways. With the population growth continuing at its present rate, the lag in highway construction and repair, and the high cost of such construction and service, it might be cheaper in the long run to maintain a passenger service at public expense than to attempt to build roads at the pace needed to avoid highway congestion."

• **What kind of trains?** Like Lundeen, a number of those shippers favoring passenger subsidies specify that any such aid should go for trains that meet the needs of today and tomorrow—not yesterday.

Henry M. Karel, director of transportation for the Cleo Wrap Corp., Memphis, Tenn., says: "I support fed-

move tools and materials to and from maintenance areas the easy way...

with NOLAN Tool and Supply Cart

This handy work-saving vehicle gets equipment where it's needed in a hurry — reduces man-hours needed to perform maintenance chores. The unit divides into 2 sections which can easily be carried by one man. Capacity 2,000 lbs. Platform size 48" x 45". Other sizes and designs available. Write for Nolan Catalog 11.

NOLAN

THE NOLAN COMPANY Pennsylvania St. Bowerston, Ohio 44695

Circle 21 on coupon page 69

HOW TO CHOP TIME & COST

Ship your products the "K" Line way: quickly, efficiently... anywhere in the world. How? Through "K" Line's fast fleet of containerized ships.

Complete mechanization permits loading and unloading in less than a day. We offer door-to-door carrier service to ports anywhere in North America

Contact "The" specialists in Far Eastern Trade. Contact "K" Line New York, Inc.; or our representative offices in San Francisco, Los Angeles, Seattle, Chicago, and Kansas City; or Kerr Steamship Co., or other agents.

"K" LINE

29 Broadway, New York, N.Y. 10006 (212) 344-4800

Circle 22 on coupon page 69

eral aid for the railroads with regard to those passenger trains that are in the experimental stages between major commuter points such as New York to Washington, New York to Boston and long runs such as Chicago to New York. I do not believe in any support for those long distance passenger trains that take one or two days to reach a point; they cannot compete with air travel today."

As noted above, nearly all of those shippers supporting the subsidy proposal are willing to carry their support to Congress. E. F. Mundy, National Biscuit Co., New York, puts it this way: "If I have a conviction, with the ultimate interest of my company at stake, I do not have the right *not* to support it—not necessarily in person, if one of the strong associations can better express my view."

"The railroads need our support and we should give our views, whether pro or con," agrees J. Robert Morton, director of corporate transportation for Combustion Engineering, Inc., Windsor, Conn., who happens to be "pro" on the subsidy question.

• **View from Canada.** K. L. Braidwood, traffic and export manager of the Glidden Co. Division of SCM (Canada) Ltd., Toronto, points out: "As far as Canada is concerned, the principle is already accepted that the federal government should provide a subsidy to the railways for a non-profitable passenger service when the Canadian Transport Commission orders the railway to continue such a service in the national interest. There is merit in this, I submit, because it places the financial burden for such non-profitable passenger service on the national revenue, and not upon other passenger services and upon shippers of freight."

• **The "no" vote.** Those opposing the railroads' proposal do so for a wide variety of reasons. Some feel that passenger trains are dead and should be given a decent burial; others feel that passenger trains could be alive and well if only they were operated properly; and many of those opposing the railroads' proposal are simply against the idea of federal aid. A sampling of "no" votes:

"Let's recognize that the car and plane have killed off the need for rail passenger service, except possibly in the densely populated areas where high speed trains could compete time-wise and cost-wise. There is too much federal 'aid' now!"—N. C. Zollar, general traffic manager, Lincoln Electric Co., Cleveland.

"Fundamentally, a person should be able to pay for a service wanted or needed. Subsidization programs have an inherent fault of being proliferated to the point where justification of the subsidy loses its identity and the question becomes: At what point do you stop?"—James D. Mitchell, traffic manager, Coca-Cola USA, Atlanta.

"Assistance should only be at the commuter train level and from local government."—W. E. Maley, director of distribution, U.S. Borax and Chemical Corp., Los Angeles.

"We are now living in the land of subsidies. It is about time that we stand on our own two feet."—Nate Kunzmann, traffic manager, Georgia Pacific Corp., Bellingham, Wash.

"Subsidies, once instituted, rapidly grow into a monster no longer bearing any resemblance to the original."—H. D. Barnard, traffic manager, Diamond Fruit Co., Hood River, Ore.

"Regardless of whether the railroads or the government assume the costly subsidization of passenger trains the shipping public will in the end pay the cost; through higher freight rates or through taxes. Any passenger run that cannot pay its own way should be abandoned, or the charges should be raised to the level that would pay. . . . The carriers should be allowed to add passenger cars to their freight trains on runs that are now operating at a loss. The day of the luxurious passenger train is gone and if the carriers are to be forced to maintain service at unprofitable levels they should be allowed to run this service in such a manner that it becomes profitable."—C. R. Ellenwood, Jr., traffic manager, American Plywood Association, Tacoma, Wash.

"Each industry has its own problems with government and each should save its 'trips to the well' for those things in which it has the greatest stake."—R. Brectinger, director of traffic and transportation, Westinghouse Electric Corp., Pittsburgh.

"If it is impossible to show a profit from the operation of passenger service, it should be discontinued—period."—G. M. Powell, vice president, Federal Compress & Warehouse Co., Memphis, Tenn.

• **Student reaction.** The most unusual reply to the March Traffic Poll came from H. D. Davis, traffic manager of Federal Glass Co., Columbus, Ohio. Davis, an instructor at Bliss College, put Railway Age's question to 24 students in an advanced traffic class. Result: Four favored government subsidies, seven thought railroads should absorb the loss, 13 took the no-profits, no-trains position. Eight saw the proposal as a step toward nationalization, eight saw it as a way to avoid nationalization, eight said it didn't make any difference. ■

New thought for food.

Fostoria, Ohio. And for a good reason. Economy. That's the story since C&O/B&O made Fostoria a new crossroads for distribution. Frankly, Fostoria is a natural. Four railroads. No congestion. Within 200 miles of ten major cities. Fostoria means, for instance, that food from the West can come here, be stored, then go direct to markets throughout the Midwest. All at low through rates.

Food for thought? You bet. And there are lots more fresh, new distribution ideas where this one came from. Find out what we've got cooking for you. Call our local salesman or write: Vice President, Merchandise Freight Group, One Charles Center, Baltimore, Maryland 21201.

THE C&O/B&O RAILROADS Cleveland 44101 • Baltimore 21201

Circle 23 on coupon page 69

LETTERS

Role of Shippers Boards

New Orleans, La.

To the Editor:

I have read with a great deal of interest the Traffic Poll of shippers published in the February 24 issue of *Railway Age*, entitled "When Shippers Meet," and wish to particularly refer to some of the comments expressed with respect to activities of the Shippers Advisory Boards.

As you know, I have been very close to Advisory Board activities over the years, having served as chairman of the Southwest and chairman of the Southeast Advisory Boards as well as president of the National Board.

There is very much to be said on both sides pro and con, but in my book there is a definite need for continuing the work in not only the Regional Boards but the National Board as well. The meetings of the Boards afford the only forum that permits shippers and railroad operating officers to get together and discuss common problems in the area of car supply, service deficiencies, loss and damage, careful car handling, etc. It has been my experience that while in some instances there has been a lack of shipper attendance, by the same token there has definitely been a lack of attendance on the part of top railroad operating officers.

Just recently, in an endeavor to bring about a "streamlined" procedure, the Southeast Board decided to hold in September 1969 a one-day meeting in Atlanta, Georgia. This meeting will be confined to top operating officers and shipper members of the Board. It is hoped that this particular meeting will produce desired results as it is proposed to eliminate all "frills" and afford both railroad and shipper representatives an opportunity to get together on an "eyeball to eyeball" basis.

In the final analysis, I wish to agree with the concluding remarks of Lee K. Mathews, president of the National Association of Shippers Advisory Boards, wherein he stated "The Shippers Advisory Boards are rich in tradition, but maybe that is not enough to make them a viable instrument of our national transportation system. Only time will tell."

However, it behooves shippers and railroads to interest themselves and cooperate to the fullest extent possible towards carrying out the objectives for which the Advisory Boards were organized—neither group can afford to permit board activities to disappear from the transportation picture. To the contrary, improved dialogue and procedures should be adopted, thereby providing more interest and enthusiasm.

Louis A. Schwartz
General Manager
New Orleans Traffic
and Transportation Bureau

For the record

Wilmington, Del.

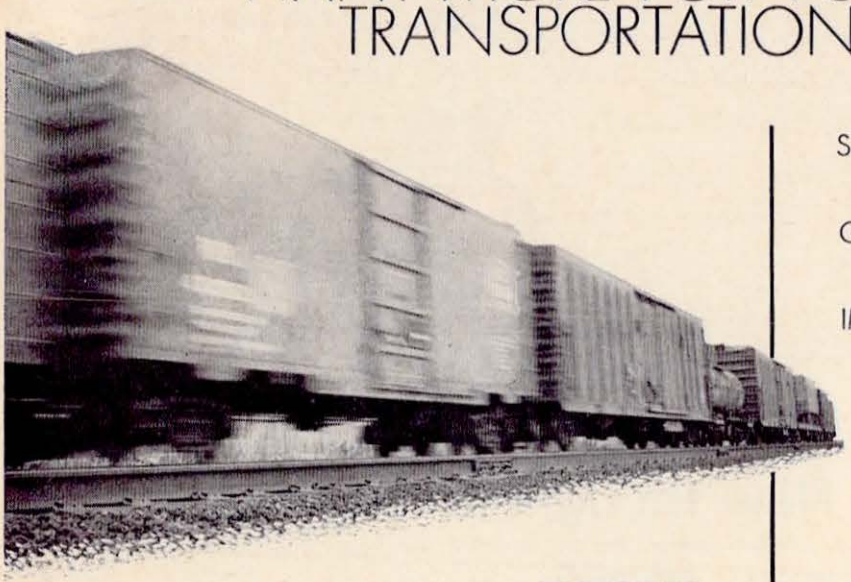
To the Editor

Your article on the introduction of our new 200-ton tank cars (RA, Feb. 24, p. 39) is a fine summary of the various elements that have been involved in the development of our tank car fleet. Unfortunately a phrase on page 40, "decisions to move larger quantities of hazardous materials in individual cars was not a major concern at Du Pont," might be misunderstood. All of us in Du Pont are constantly working to improve the safety of hazardous materials in transit and know we can never be complacent. The movement of larger quantities of hazardous materials in individual cars is, and will continue to be, a matter of major concern to Du Pont.

G. P. Church
Director, Traffic Department
E. I. du Pont de Nemours & Co.

WANT MORE FOR YOUR TRANSPORTATION BUCK?

SEE US.



SALES ORATORY?
No.

GIMMICKS?
None.

IMPROVEMENTS?
Lots of them.

Better terminal operations. Better maintenance of track and equipment. Better scheduling. Better tracing and car control. Closer supervision. Higher dedication to duty.

AND SERVICE FUNDAMENTALS?
Never ignored.

WHAT'S IN IT FOR SHIPPERS?
Good transportation that's being bettered every day. Cash in on it. Call us.

A. F. Hatcher
Vice President—Traffic

Rock Island

ROCK ISLAND LINES

Circle 24 on coupon page 69

Place an egg across the palm of one hand, curl your fingers around it and squeeze. Go ahead, you can't break it. Try again. The harder you push with your palm, the harder you pull with your fingers, supporting the fragile shell on all sides.

Now let's compare the eggshell to the bowl of a centerplate and your palm to a 100 ton swaying, rocking railroad car. Put the egg on a table and press down. The egg is instantly crushed because it isn't supported, just as an ordinary centerplate bowl is eventually cracked by the immense weight pushing on the relatively small, unsupported shoulder area. But hold the bowl sides together with lateral ribs as you held the egg together with your fingers, and the centerplate bowl is much stronger. The ribs counter lateral stresses placed on the bowl shoulder by the rocking load. BFF makes a one-piece ribbed centerplate. And even better, one with a solid bowl. Winged or standard, drilled to your specs. Ask about our 70-ton-plus centerplates.

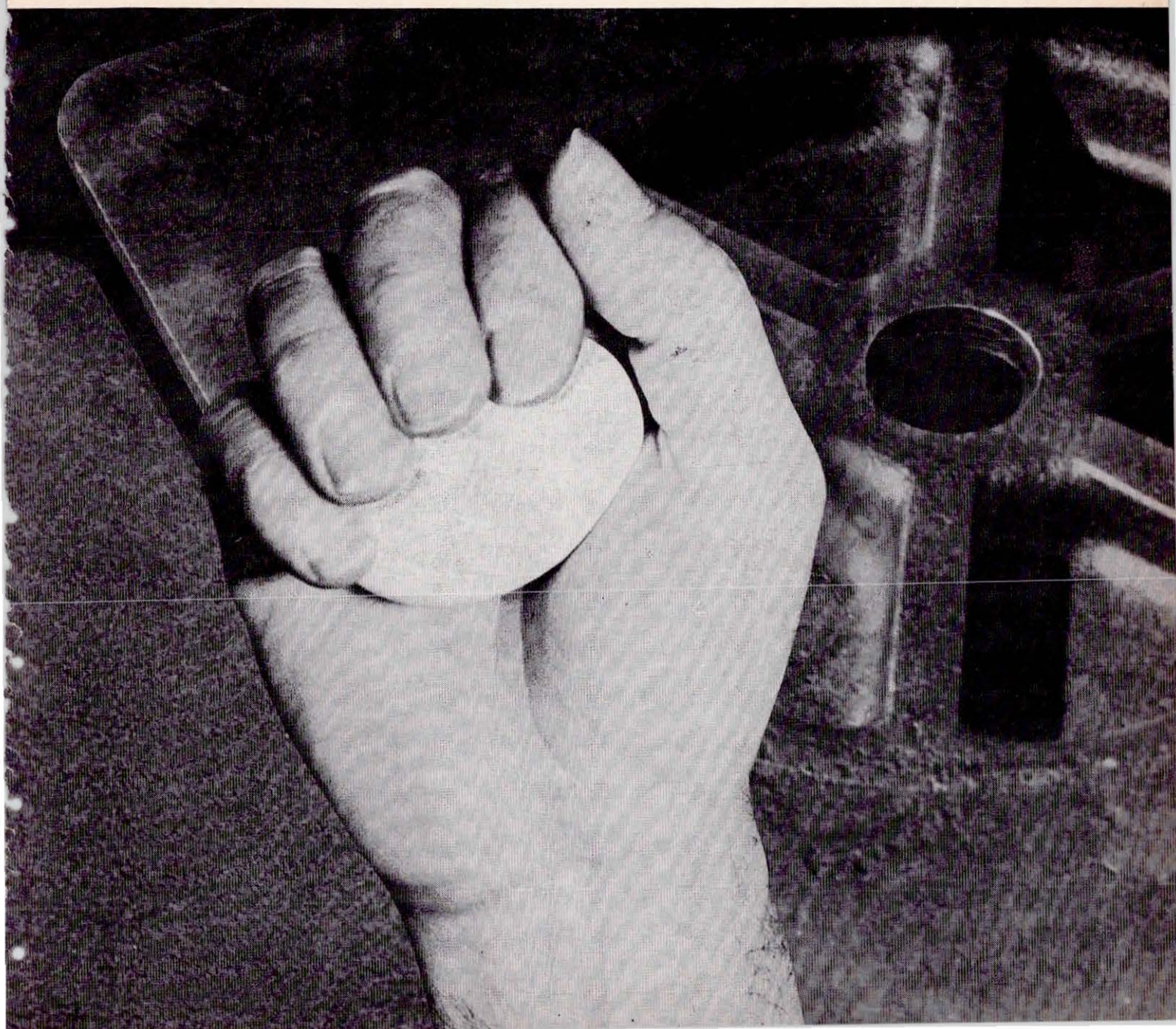
Circle 25 on coupon page 69

BFF BERWICK FORGE & FABRICATING CORP.

Box 188 Berwick, Pa. 18603 Chicago: 80 E. Jackson Blvd.
Arlington: Southeastern Railway Supply, Inc., 933 Kenmore St.

Mother Nature proves our point.

RPI



J. Robert Kunkel
C&NW

William J. Day
D&RGW

W. L. Smith
GN

R. K. Osterdock
IC

PEOPLE IN THE NEWS

AKRON, CANTON & YOUNGSTOWN.—Carl Angelo appointed traffic manager, Akron, Ohio.

BALTIMORE & OHIO.—William L. Verbeck, sales representative, Kansas City, Mo., appointed district sales manager, Hamilton, Ohio.

BELT RAILWAY OF CHICAGO. —Clarence L. Holt, vice president and auditor, retires Mar. 31 after more than 50 years of service. **W. J. Cassidy,** assistant auditor, elected auditor, effective Mar. 1. **H. E. Shepherd,** assistant to auditor, named manager general accounting. **M. B. Ostrowski,** assistant auditor car accounts, named manager revenue and car accounting. **R. F. Heger,** manager data processing, named to the newly created position of director data systems. Mr. Heger's successor is **J. J. Vogt,** assistant manager data processing.

W. F. Hartig, purchasing and supply agent, retires Mar. 31 after more than 50 years' service. **V. L. Smith,** superintendent motive power-assistant purchasing agent, became chief of motive power and purchasing agent on Mar. 1.

BESSEMER & LAKE ERIE.—Robert B. Wooters, manager marketing—coal and ore, Pittsburgh, Pa., appointed director of marketing.

CHICAGO & EASTERN ILLINOIS.—Raymond E. Gotshall named manager-coal marketing and **Norman D. Clucas** appointed manager-coal sales and service, both with headquarters at Chicago.

CHICAGO & NORTH WESTERN.—J. Robert Kunkel, marketing manager, coal, chemicals fertilizer and petroleum, appointed assistant vice president and director of rates and divisions.

Raymond J. Degnan, general manager of intermodal sales, advanced to general sales manager—north central states.

G. J. McDermott named assistant superintendent car shops, Clinton Car Shop, Clinton, Iowa. **D. D. Hed, H. P. Lukehart** and **C. J. McCabe** appointed district general car foremen, with headquarters at Oelwein, Iowa, Council Bluffs, Iowa, and Butler, Wis., respectively. **W. A. Bowlds** becomes division general car foreman. Chadron, Neb. **A. R. Asplund** named general car foreman-nights, Proviso, Ill.

James H. Alesia, general attorney, named assistant general counsel.

DENVER & RIO GRANDE WESTERN.—Ernest J. Moore, manager of market research, named to the newly created position of market director-manufactured products. **Carl H. Smith,** market analyst, succeeds Mr. Moore.

William J. Day named president, **Computer Sharing Services,** D&RGW's first non-transportation diversification. Mr. Day has served simultaneously as supervisor of CSS and as the railroad's director of management information.

W. J. Holtman, vice president-executive department, elected executive vice president and general manager. **John Ayer, Jr.,** vice president-operations, elected vice president-technical services. **C. E. Hightower,** chief budget analyst, becomes assistant to executive vice president and general manager. **J. E. Allen,** superintendent, Colorado division, appointed system master mechanic, succeeding **J. P. Spiess,** named assistant to the chief engineer. **J. E. Timberlake,** market director-fuels, replaces Mr. Allen.

G. A. Bennewitz, Jr. named market director-fuels, Denver. **R. L. Eisenhauer** appointed district representative, Denver, to succeed the late **S. M. Spengler.**

DETROIT, TOLEDO & IRONTON.—L. William Klenk appointed traffic manager-sales, to succeed **R. S. White,** who retired Dec. 31, 1968, after more than 42 years of service. **Thomas P. Wall** named district sales manager, Pittsburgh, succeeding **J. Gordon Thomas,** retired. On Dec. 2 Mr. Thomas joined the Werner-Donaldson Transfer & Storage Co. as manager, national accounts.

B. D. Walker appointed district sales representative, Chicago.

ERIE LACKAWANNA—Paul T. Talkington, district sales manager, Chicago, appointed assistant freight traffic manager there, succeeding **W. P. Campion,** promoted. **Arch F. Gainey** succeeds Mr. Talkington. **Joseph D. Given** appointed distirct sales manager, Seattle, Wash., succeeding **Raymond J. Dundon,** retired Dec. 31.

GRAND TRUNK WESTERN-CANADIAN NATIONAL.—A. Russell Hayes appointed district sales manager, Flint, Mich., succeeding **Glen D. Gilbert,** retired.

GREAT NORTHERN—Worthington L. Smith, assistant to the vice president of the operating department, appointed assistant vice president of the department, with headquarters in St. Paul.

Vance A. Opsahl, manager, marketing planning and control, named to the newly created position of assistant director of sales, with headquarters in Seattle.

H. D. Knudsen named supervisor, loading and packaging.

K. W. Batcheller appointed assistant to chief mechanical officer, St. Paul, Minn. He was formerly supervisor quality control, mechanical department.

Michael H. Karl, manager of pricing, Lines West, named manager of pricing, Pacific Coast, effective March 1. **Curtis E. Simmons,** traffic manager, Port of Seattle, succeeds Mr. Karl.

Joseph J. Messina, traveling sales representative, Pittsburgh, appointed sales manager, Washington, D.C., succeeding **K. D. Thornton,** resigned.

GULF, MOBILE & OHIO.—P. E. DeWitt, general master mechanic, Mobile, Ala., appointed chief mechanical officer there, succeeding **C. W. Esch,** who retired Dec. 31, 1968, after more than 42 years of service. Mr. DeWitt's successor is **W. C. Gray,** master mechanic, Mobile, who in turn is replaced by **J. C. McClure,** mechanical foreman, Corinth, Miss. **G. D. Brown,** mechanical engineer, Mobile, named assistant chief mechanical officer there.

Leslie Farrell, division freight traffic manager, Meridian, Miss., retired Dec. 31, 1968, after more than 48 years of service.

I. E. Murphy, district freight and passenger agent, San Francisco, promoted to district traffic manager there.

Clark Y. Hall, III named division traffic manager, Meridian, Miss.

ILLINOIS CENTRAL.—Richard K. Osterdock appointed general superintendent, Chicago. Mr. Osterdock's successor as superintendent, Chicago division, is **I. B. Hall,** former superintendent, Tennessee division, Memphis. **M. E. Corzine** succeeds Mr. Hall. **C. W. Damiano,** assistant superintendent, St. Louis division, Carbondale, Ill., named assistant superintendent, St. Louis division, Paducah, Ky. **J. W. Harrell** succeeds Mr. Damiano. **G. G. Hester,** trainmaster, Baton Rouge and Hammond districts, Baton Rouge, La., named assistant superintendent, Memphis Terminal, Tennessee division, Memphis. Mr. Hester's successor is **E. L. Moyers. W. L. McNeer** becomes assistant superintendent, Memphis Terminal, Tennessee division, Memphis. **G. W. Cox** named assistant superintendent, Clinton, Havana and Decatur districts, with headquarters at Decatur, Ill. **T. D. Hancock,** trainmaster, Markham Yard, advanced to assistant superintendent freight service, Markham Yard. **E. W. Wilkins,** trainmaster, suburban service, Randolph Street, Chicago, replaces Mr. Hancock. **J. S. Windal** succeeds Mr. Wilkins. **H. C. Haney, Jr.** named train-

(Continued on page 75)

The only integrated shipping package in the world.

Never has shipping been more efficient. And only Canadian Pacific has this unique service to move goods in, out or through Canada and overseas, with a speed and simplicity possible nowhere else.

Canadian Pacific is rail, highway, sea and air all in one. Completely packaged into one system guided by space-age communications.

With our computerized freight tracing system, we can track your shipment down and give you a fast answer. And there are no tie-ups that come with shifting from one company to another. We are responsible. Period.

You'll never know how simple life can be until you've shipped with CP Rail.

Next time, call us. We'll take the load off your shoulders.

CP Rail

Reliability IS ONLY

...FOR STANDARDIZING ON THE KEYSTONE Single Acting SHOCK CONTROL

KEYSTONE RAILWAY EQUIPMENT COMPANY General Offices: 310 S. Michigan Ave. • Chicago, Ill. 60604
Manufacturing: Camp Hill, Pennsylvania 17011

Sales Offices: San Francisco, California • Chicago, Illinois • St. Paul, Minnesota • St. Louis, Missouri • Omaha, Nebraska
New York, New York • Philadelphia, Pennsylvania • Springfield, Virginia • Montreal, Quebec, Canada • Mexico D. F.

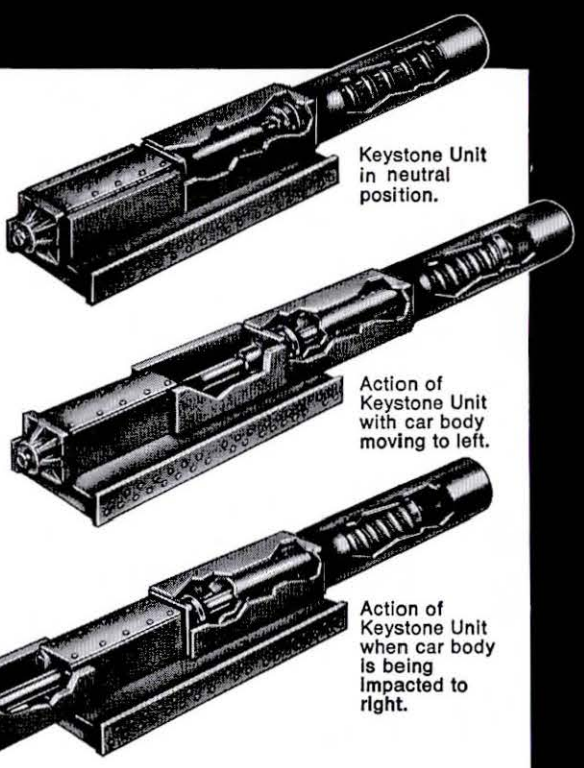
ONE Good Reason

HERE ARE 7 MORE!

- **Superior cushioning efficiency and protection—Up to 25% increased energy dissipation compared to the best type END-OF-CAR Devices**
- **Constant cushioning protection—Definite reduction in number of secondary impacts**
- **Greater ease in train handling**
- **Self-contained—Complete unit with fixed sill stop simplifies applying unit to a car**
- **Absolute minimum maintenance — Simple design and construction assure maximum performance and service life**
- **Requires maintaining only 1 unit per car instead of two**
- **Total applied weight (all necessary parts including Unit, Spring, Piston Stop and Body Stop, and necessary car builder materials) less than 2450 lbs.**

We still believe the main purpose of a cushioning system is to provide *maximum protection to lading and cars under all train handling conditions,* and the KEYSTONE Single Acting SHOCK CONTROL Unit is designed to do exactly that!

Ask your Keystone representative to show you charts, facts and figures—positive evidence of the *extra savings* you can enjoy from more effective cushioning protection, maximum service life and absolute minimum maintenance.



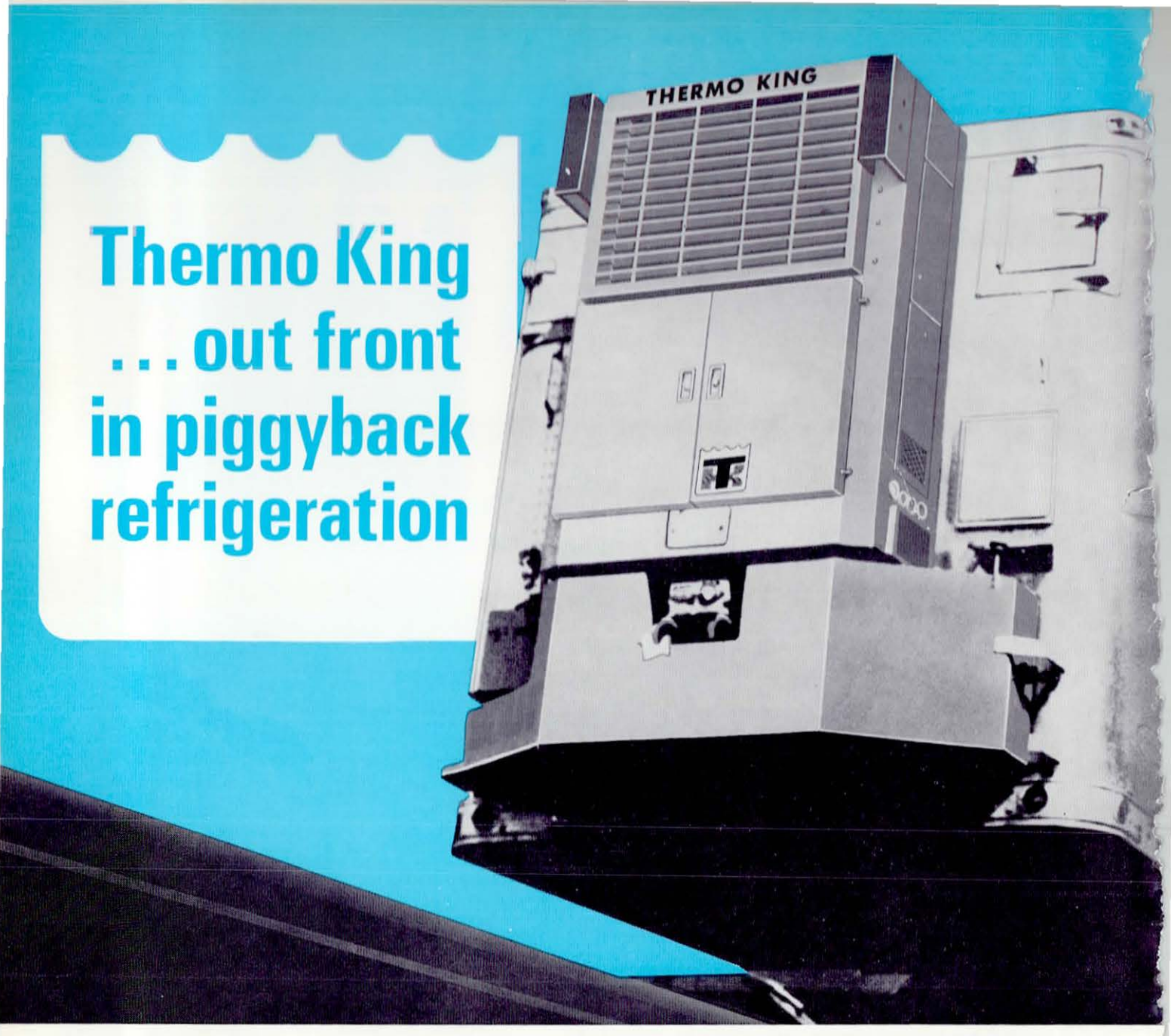
Keystone Unit in neutral position.

Action of Keystone Unit with car body moving to left.

Action of Keystone Unit when car body is being impacted to right.

Write or call 312/427-7160 for new Keystone Catalog.

Thermo King ...out front in piggyback refrigeration

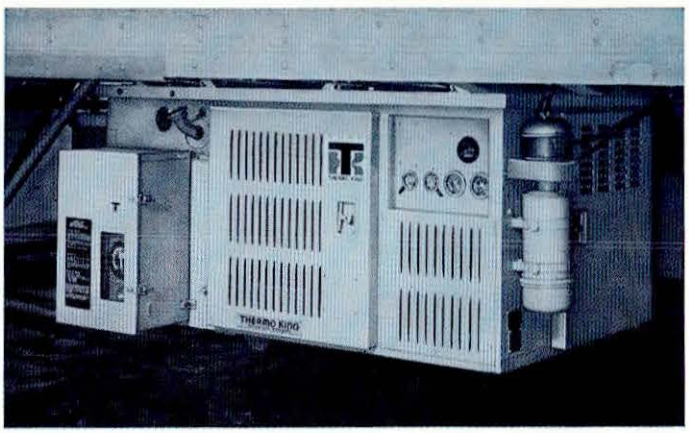


Professional piggybackers rely on special Thermo King frontmount or undermount units for perishable protection

Specially built to the rugged requirements of piggyback operations, these Thermo King refrigeration units keep perishable cargoes at constant temperatures, no matter how long the run or variable the ambients.

In these diesel-powered units, Thermo King has answered the industry need for absolute reliability with extra capacity components, engineering that provides an extra margin of safety, and maintenance features that save downtime and labor.

For information on why Thermo King units mean lowest cost per mile in refrigerated piggyback operations, write Thermo King Corp., Railroad Division, 314 W. 90th St., Minneapolis, Minn. 55420.



WORLD LEADER IN TRANSPORT REFRIGERATION

THERMO KING®

corporation

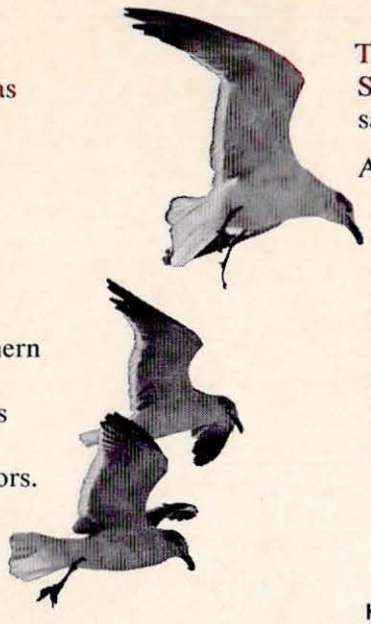
MINNEAPOLIS, MINNESOTA 55420

SEA LEGS

When you serve five busy Gulf ports, even a land-based operation like Kansas City Southern needs sea legs.

We have them. And they run from Kansas City to New Orleans, Baton Rouge, Lake Charles, Beaumont, and Port Arthur.

When you go transoceanic, make your first port of call the Kansas City Southern office nearest you. Our knowledge of shipping schedules, tariffs, and customs (both here and abroad) can help you avoid expensive export and import errors.



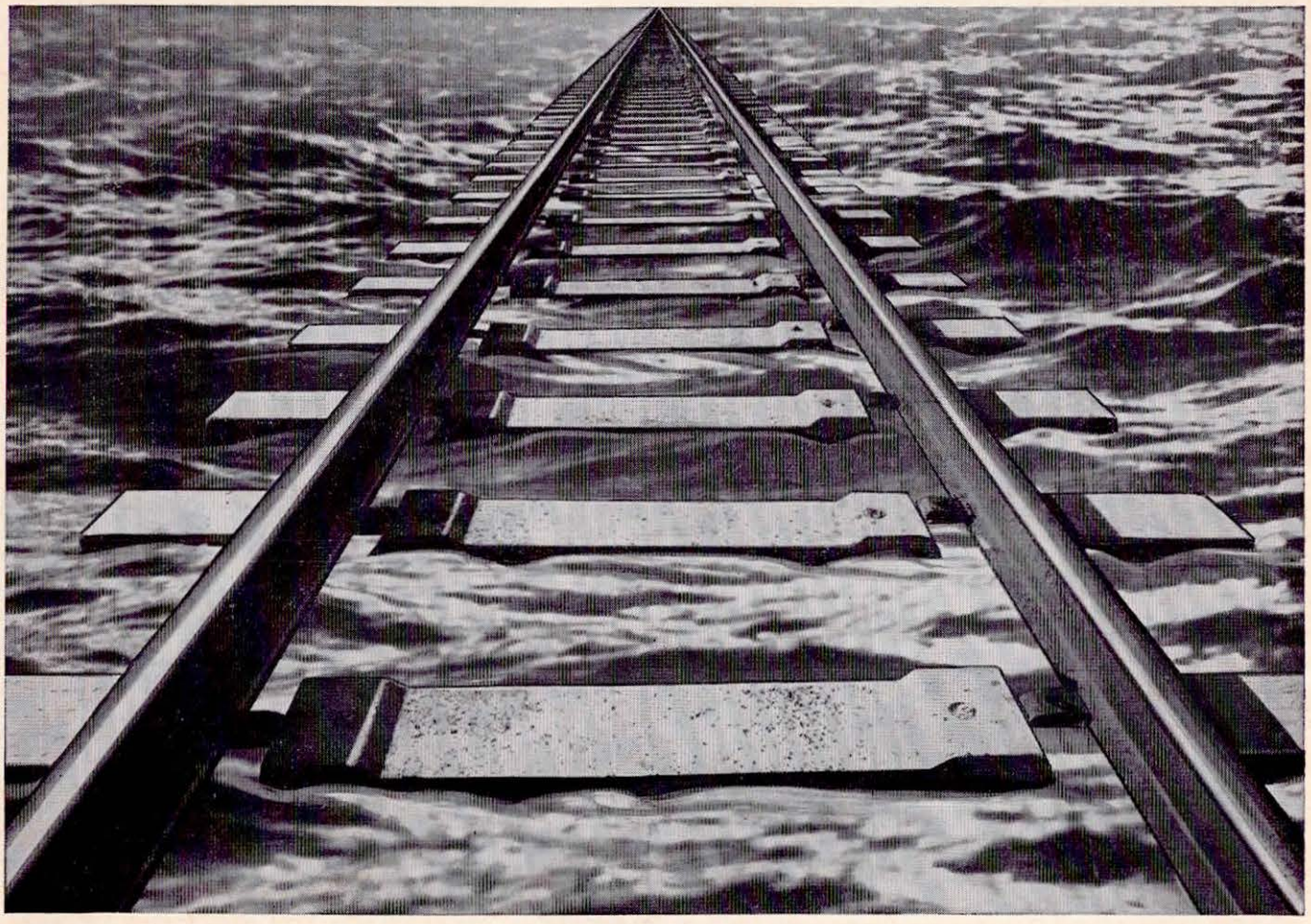
This service is part of the Kansas City Southern program that launched "smooth sailing" in Mid-America.

And it's as free as the breeze.

KANSAS CITY SOUTHERN Lines

the uncommon carrier

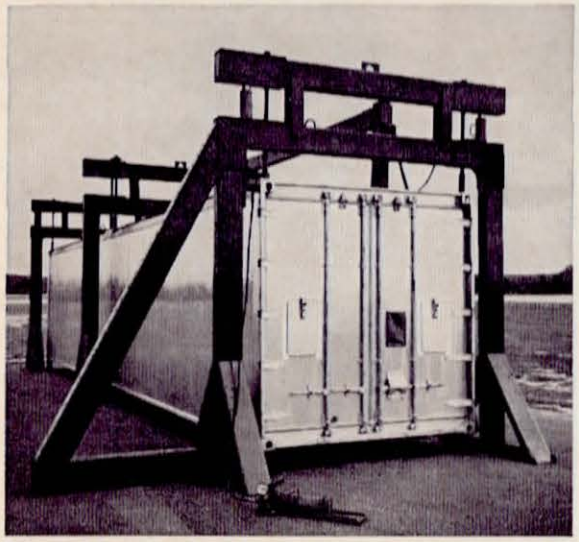
J. W. SCOTT
Vice President—Traffic
Kansas City, Missouri 64105
Telephone (816) VIctor 2-0077



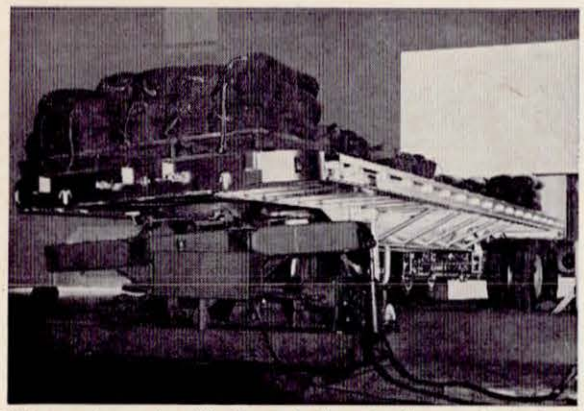
Circle 29 on coupon page 69

No wonder Dorsey trailers and containers are so reliable!

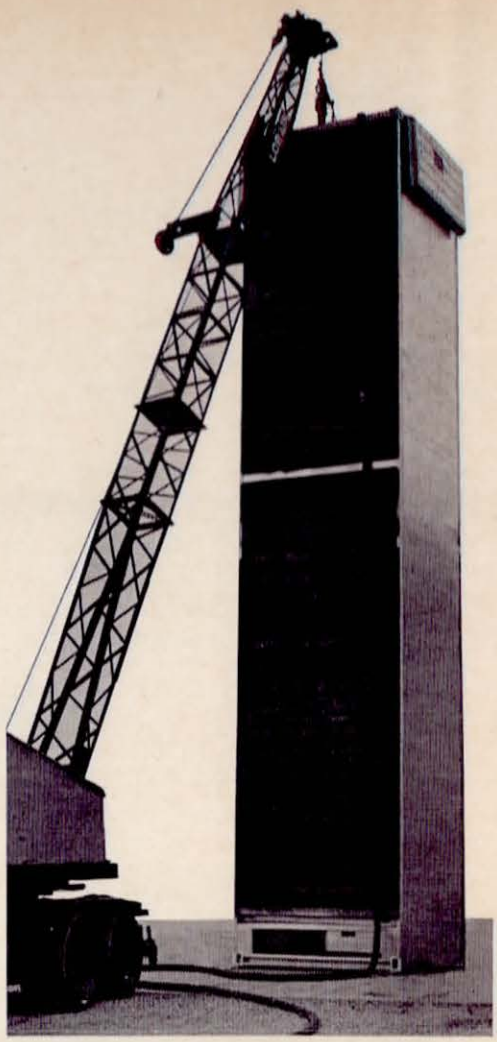
Because ruggedness is a must in piggyback operation, Dorsey prototype trailers are subjected to the most exhaustive tests in the industry. Some utilize highly sophisticated equipment developed by our engineers to insure accuracy of results and to reduce time required for testing. Others are simple but equally effective, such as standing a container on end and pumping in 30,000 pounds of water to test front wall strength

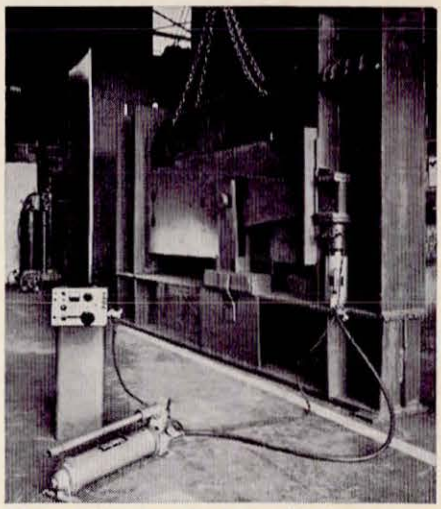


This multi-purpose test fixture allows engineers to take accurate readings on stresses applied vertically, horizontally and diagonally

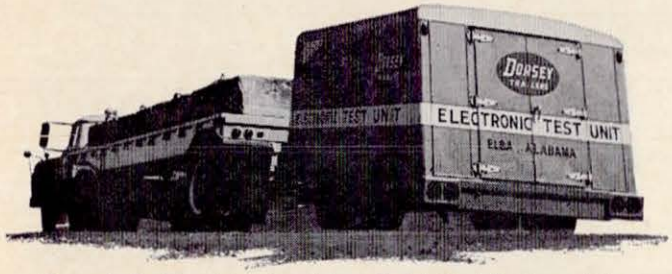


This equipment subjects a trailer to the equivalent of 200,000 road miles in less than 60 days. Rollers rotate the wheels while the oscillating fifth wheel subjects the unit to a severe wracking motion at pre-set intervals





A large hydraulic cylinder applies forces simulating the strains imposed at the point where tractor fifth wheel supports a loaded trailer



Dorsey's "rolling laboratory" is pulled behind trailers while the effects of shock, stress and strain upon various points are recorded on electronic equipment. A technician in the test unit operates recording equipment.

Call for engineering assistance or quotations on any model piggyback trailer. A Dorsey Executive Account Manager will be at your desk within hours.

DORSEY TRAILERS

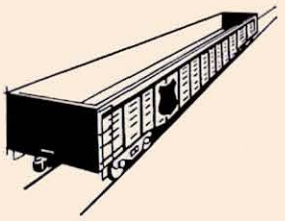
DORSEY TRAILERS • ELBA, ALABAMA

A Subsidiary of The Dorsey Corporation

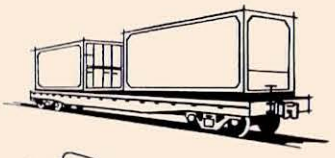
Circle 30 on coupon page 69

We've got what it takes!

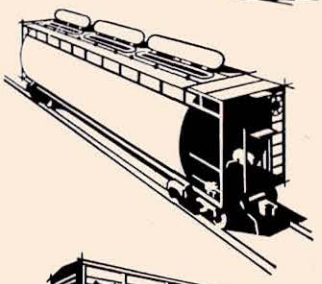
"PERFECT SHIPPING"



It's more than a slogan . . . it's *delivery* . . .
in good condition and on time.
That takes the right equipment and
experienced personnel.



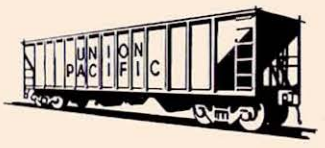
on SHIPMENTS ROUTED UNION PACIFIC



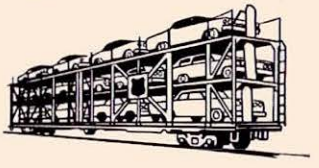
***PS/SP* PERFECT SHIPPING is standard procedure**

—and for perfect plant sites located in the Union Pacific West . . . write in complete confidence to Edd H. Bailey, President, Union Pacific, Omaha, Nebraska 68102.

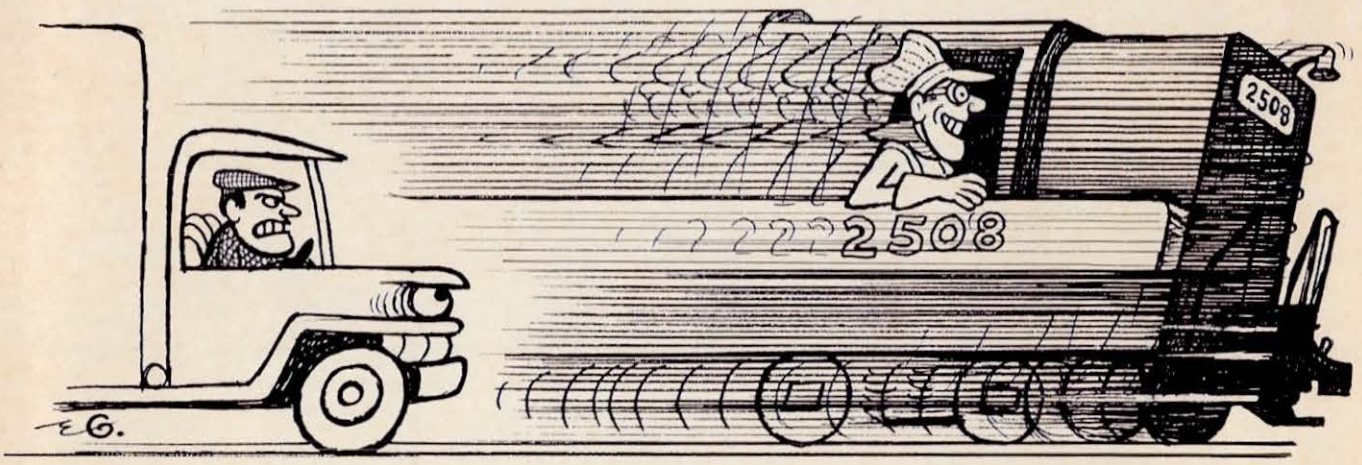
CUSHIONED CARGO IS ANOTHER SHARP NEW TOOL OF UNION PACIFIC



UNION PACIFIC RAILROAD
GOLDEN SPIKE
1869 1969
CENTENNIAL



New lower-than-truck "Boxcar Bargain" Rates



Southern leaves trucks standing still when it comes to saving you money.

If you're shipping by truck within the Southeast, you may be wasting money. Effective March 11, Southern Railway is lowering standard-boxcar shipping rates for over 18,000 kinds of freight. And with very few exceptions, these new "Boxcar Bargain" rates are lower than truck charges.

To find out more about our lower-than-truck "Boxcar Bargain" rates, contact your Southern Railway representative. Or send for our handy slide-rule scale showing the new rates. Write Customer Information, Southern Railway System, P.O. Box 1808, Washington, D.C. 20013.

Compare your truck costs against these representative "Boxcar Bargain" rates (in cents/cwt. in 40' boxcar):

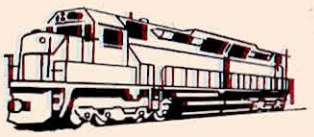
MILES	25M lb.	35M lb.	50M lb.	100M lb.
200	57	40½	37½	33½
400	94	67	62½	57
600	130	93	87½	81

SOUTHERN

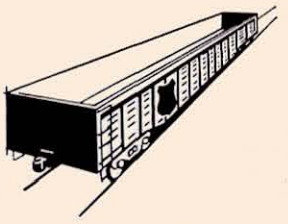
INNOVATIONS THAT SQUEEZE THE WASTE OUT OF DISTRIBUTION

Circle 33 on coupon page 69

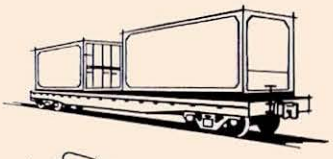
We've got what it takes!



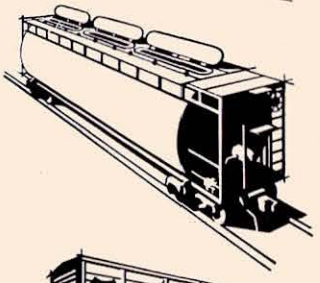
"PERFECT SHIPPING"



It's more than a slogan . . . it's *delivery* . . .
in good condition and on time.
That takes the right equipment and
experienced personnel.



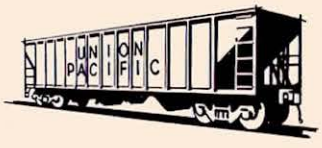
on SHIPMENTS ROUTED UNION PACIFIC



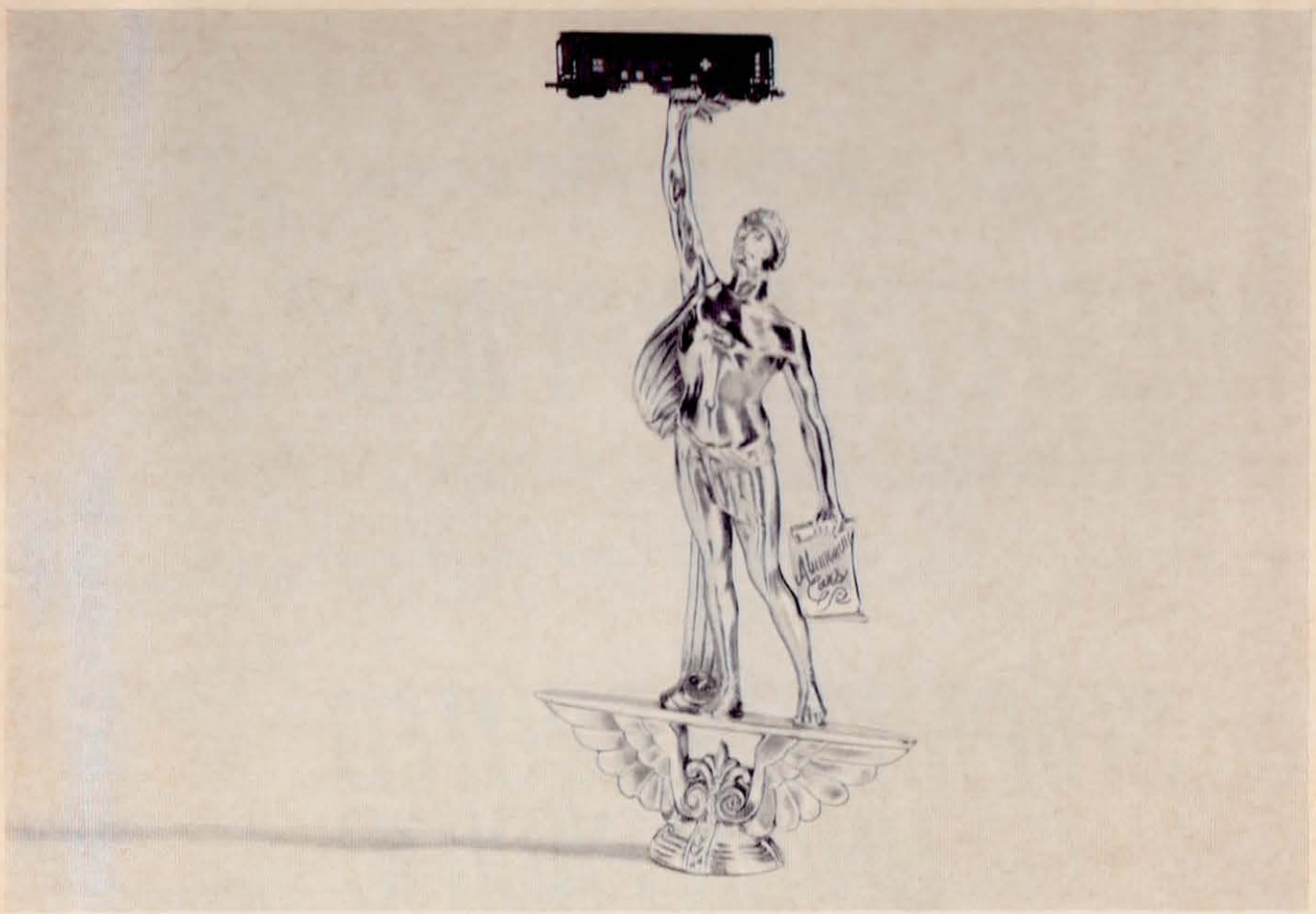
***PS/SP* PERFECT SHIPPING is standard procedure**

—and for perfect plant sites located in the Union Pacific West . . . write in complete confidence to Edd H. Bailey, President, Union Pacific, Omaha, Nebraska 68102.

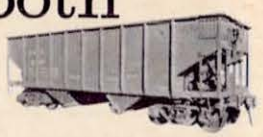
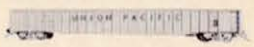
CUSHIONED CARGO IS ANOTHER SHARP NEW TOOL OF UNION PACIFIC



UNION PACIFIC RAILROAD
GOLDEN SPIKE
1869 1969
CENTENNIAL



The trouble with being famous for Aluminum cars... is that some people forget that we've been building steel cars for over fifty years...

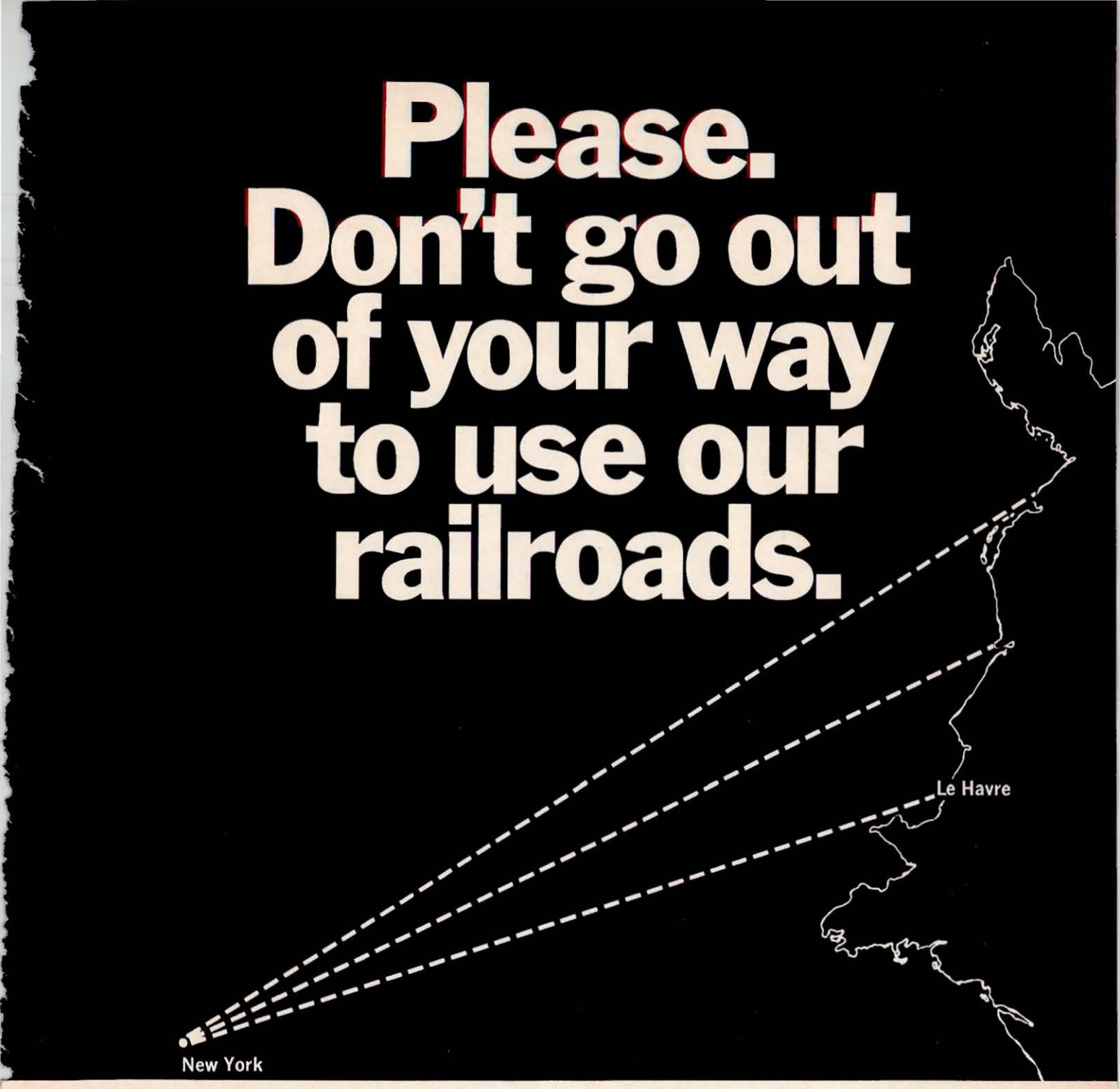
Great steel cars too, both standard and custom  in a wide variety of sizes,  and capacities . It will be to your advantage to remember Magor next time you are in the market for steel cars.

MAGOR

Magor Railcar Division · Fruehauf Corporation · Clifton, N.J. 07015

Circle 31 on coupon page 69

Please. Don't go out of your way to use our railroads.



Why ship containerized freight to any other port in Europe when French National Railroads and its affiliated Company, "Compagnie Nouvelle des Cadres", specially created to handle containers, can deliver your goods from Le Havre to "les customers" faster.

Containerized freight consigned to Le Havre is on the railroads to your markets in Europe (at 70 miles an hour) while freight consigned to other major ports is still at sea.

The containerized freight handling facilities at Le Havre are now among the best in Europe. In fact they are so advanced that we can guarantee scheduled shipment of your freight to the consignee anywhere in Europe.

The freight trains are waiting at the dock. Equipped to handle any size containers. And your shipment goes direct from the boat to the train. With no lost dock time.

From Le Havre, the French National Railroad's track network fans out to Europe. Within hours your goods are in Paris—Lyons—Geneva—Munich—Zurich. Anywhere in Europe where there's railroad track. And our freight trains are prompt, punctual and dependable. This means efficient and economical service to you and your customers.

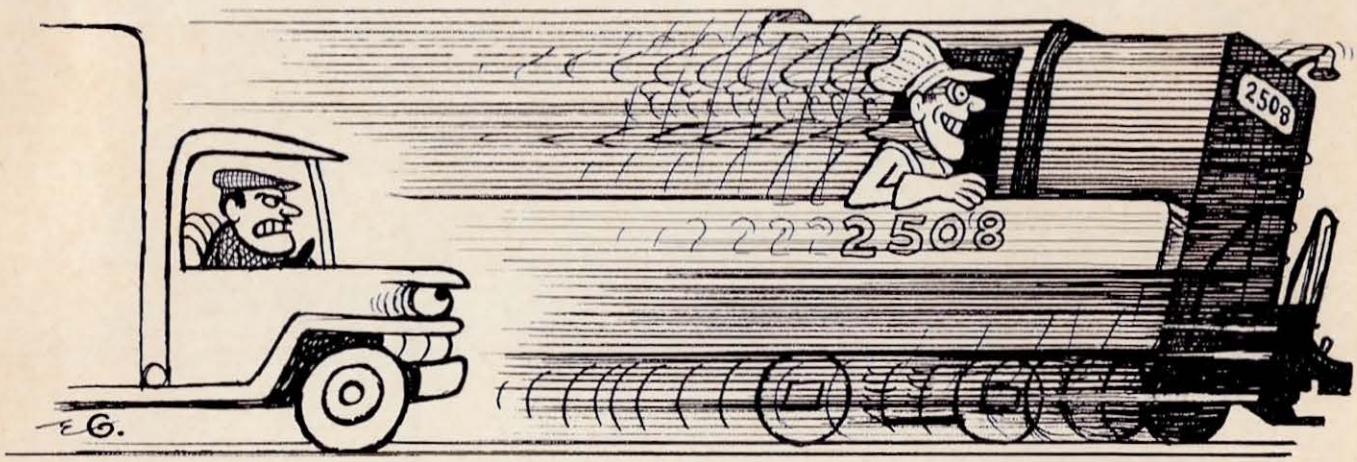
So don't go out of your way to use our railroads and get your goods to market faster.

For further information write to the French National Railroads 610 5th Ave., N. Y. New York Freight Department E. Or call French National Railroad at 582-2110.

FRENCH NATIONAL RAILROADS

Circle 32 on coupon page 69

New lower-than-truck "Boxcar Bargain" Rates



Southern leaves trucks standing still when it comes to saving you money.

If you're shipping by truck within the Southeast, you may be wasting money. Effective March 11, Southern Railway is lowering standard-boxcar shipping rates for over 18,000 kinds of freight. And with very few exceptions, these new "Boxcar Bargain" rates are lower than truck charges.

To find out more about our lower-than-truck "Boxcar Bargain" rates, contact your Southern Railway representative. Or send for our handy slide-rule scale showing the new rates. Write Customer Information, Southern Railway System, P.O. Box 1808, Washington, D.C. 20013.

Compare your truck costs against these representative "Boxcar Bargain" rates (in cents/cwt. in 40' boxcar):				
MILES	25M lb.	35M lb.	50M lb.	100M lb.
200	57	40½	37½	33½
400	94	67	62½	57
600	130	93	87½	81

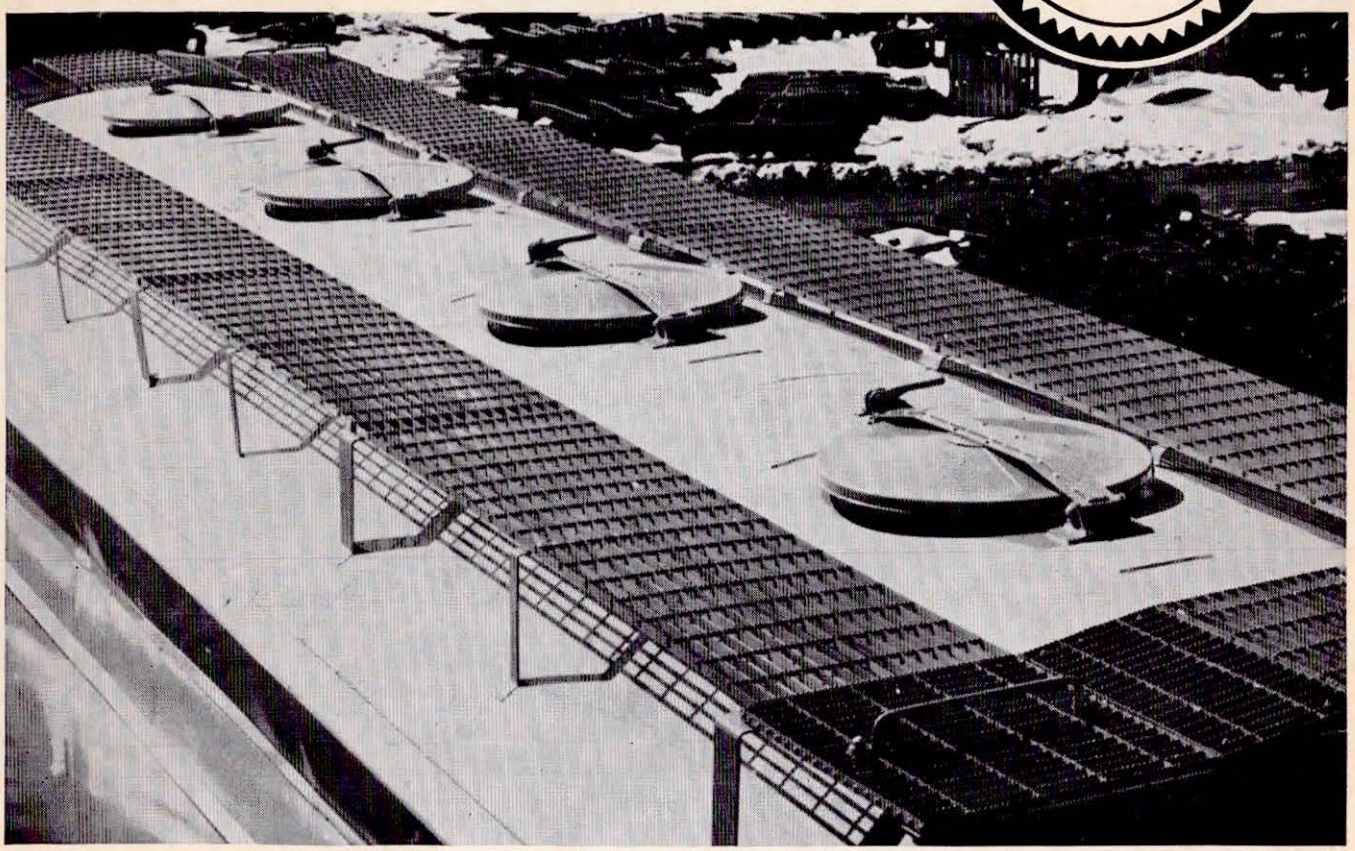
SOUTHERN

INNOVATIONS THAT SQUEEZE THE WASTE OUT OF DISTRIBUTION

Circle 33 on coupon page 69

MOLDED FIBER GLASS HATCH COVERS *specified by*

MISSOURI PACIFIC LINES



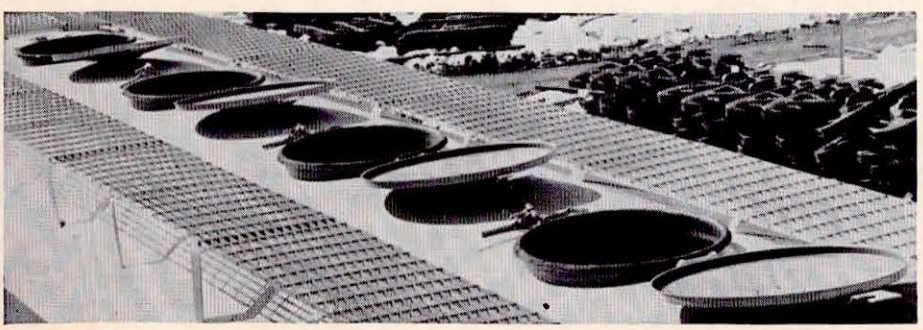
Lightness . . . strength . . . durability — these features prompted Mo-Pac to specify Molded Fiber Glass Hatch Covers for 100 new silica hopper cars, ordered from ACF Industries.

Molded Fiber Glass Hatch Covers weigh only 22 pounds, one-third the weight of steel! They're strong because they're molded in matched metal dies, assuring uniformity and no thin spots.

They're durable because molded fiber glass is impervious to rust, corrosion or dents, and have proved themselves in slam tests which far exceed normal usage.

Why not investigate this and other MFG products for the transportation industry? Write Molded Fiber Glass Products Company, 4671 Benefit Ave., Ashtabula, Ohio 44004, (216) 993-2171,

A division of Molded Fiber Glass Companies, Inc.

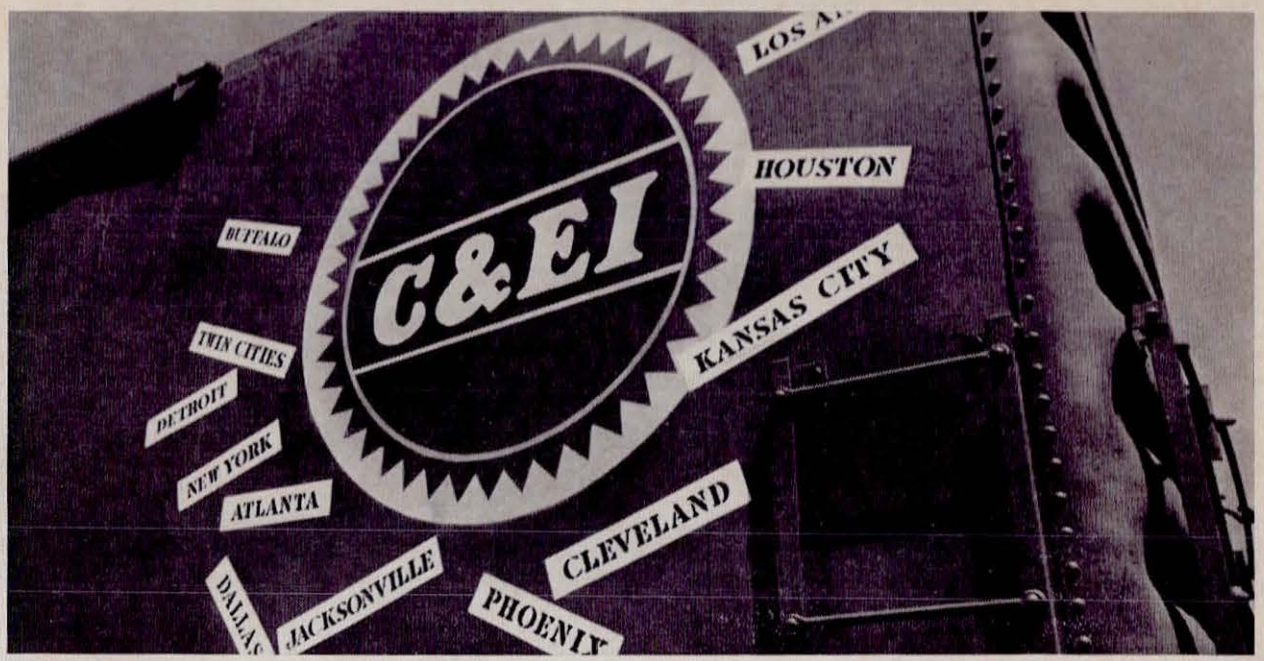


MFG

MOLDED FIBER GLASS HATCH COVERS

C&EI starts a lot of things it can't finish.

Which is why we're Mid-America's most versatile railroad.



With only 862 miles of track in Indiana and Illinois, it obviously isn't how far we travel that's important. It's where we travel.

Because C&EI is a "feeder" or connecting line. We take freight from out in left field and put it smack into the mainstream of mainline transportation. If you want to ship north out of Chicago toward Oshkosh...by gosh, we can arrange it. Got a big deal in the northeast, like Buffalo? Start with us and get there fast. West, southwest, deep in the heart of Alabama or a straight sweep to Florida... C&EI has enough track to put you on the right track.

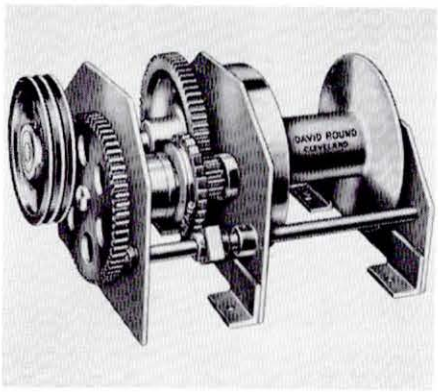
Remember that, next time you ship to, through or from Mid-America. We may only be a short railroad. But you'll be amazed how far you can go because we have the right connections.

CHICAGO & EASTERN ILLINOIS

C&EI

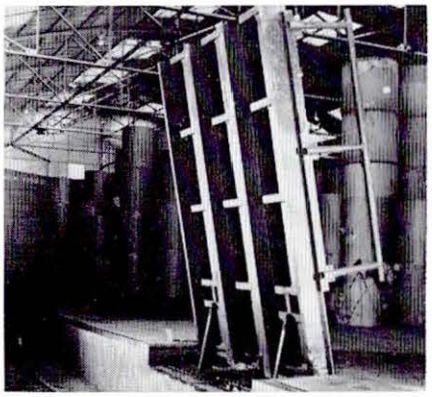
Circle 34 on coupon page 69

NEW PRODUCTS REPORT



Industrial winches (RA-1)

The Model 101 manual winch is of 5-ton capacity with compound gearing, or 1,500 lb with rapid lift; Model 101 Junior, 2-ton capacity with compound gearing, 600 lb with rapid lift. Rope capacity of rotating drum varies from 485 ft of ⅜-in. rope to 80 ft of ½-in. rope, depending on model. Model 102, for double-belt motor drive, is of 5-ton capacity; Model 102 Junior, 2-ton capacity, with rope capacities of from 115 ft of 7/16-in. rope to 500 ft of ⅜-in. rope. *David Round & Sons, Inc.*



Bridge lift (RA-2)

The Cantilever Bridge Lift designed to bridge the gap between docks and buildings can be furnished to meet any roll-over load requirement for single- or multiple-track applications. With bridge in raised position, freight cars can be switched in and out of a plant; in lowered position, bridge permits necessary cross traffic. The checkered steel-plate platform of the unit has a standard capacity of 5,000 to 40,000 lb. Safety curbs, handrails are also available. *Beacon Machinery, Inc.*

Lift trucks (RA-3)

Thirteen new models of fork lift trucks and 21 models of sideloaders will be available through Allis-Chalmers dealers beginning about mid-1969. The new models, manufactured by a British firm, Lancer Boss Ltd., do not compete with A-C's present line of materials handling equipment. The new fork lift trucks have lifting capacities of from 8,000 to 100,000 lbs, while the sideloaders can handle containers up to 40 ft. long, weighing up to 100,000 lbs. *Allis-Chalmers.*

Conveyor system (RA-4)

The Palletflo conveyor, utilizing Hysteresis, a new flow-control principle, operates at a slope of about ⅜ in./ft and has handled unit loads in excess of 7,000 lb. A pallet, when placed on the infeed end of a conveyor or rack, gradually picks up speed until it reaches a predetermined peak—usually about 30 ft per min. Regardless of conveyor length, the rate remains at this value for remainder of run as a result of the hysteresis control which occurs within the outer rim of the conveyor wheel. Palletflo rails, each weighing approximately 50 lb, are furnished in standard 10-ft-long sections with flange holes at both ends and center for fastening to supports, splicing, and for fastening guard rails and other devices. A complete system of standard fittings and accessories enables the construction of gravity conveyors, floor-level push-line systems, multi-level racks for first-in, first-out storage and order picking racks with built-in empty pallet return. All systems control pallet speed without the use of pacing or retarding devices, but depend on hysteresis. *Kornylak Corp.*

End-of-car cushioning (RA-5)

An end-of-car cushioning system with a rubber-hydraulic unit protects against both buff and draft forces on the car. This is an addition to the line of Freight-Saver cushioning devices which utilizes the same hydraulic-pneumatic principle. The new unit adds rubber mats at the car's coupler to form a resilient link to the cushioning unit. Compressed dry nitrogen recenters the unit without heavy mechanical springs. *ACF Industries.*

RAILWAY AGE
THE TRANSPORTATION WEEKLY

30 Church Street, N.Y., N.Y. 10007 READERS' SERVICE (Att. J. Lindstrom)

PLEASE SEND ADDITIONAL INFORMATION ABOUT PRODUCTS IN ADVERTISEMENTS NUMBERED: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

PLEASE SEND INFORMATION ABOUT PRODUCTS DESCRIBED ON PAGE 69 MARKED: RA-1 RA-2 RA-3 RA-4 RA-5

NAME ..... **TITLE** .....

ADDRESS .....

COMPANY .....

CITY ..... **STATE** ..... **ZIP** .....

• **Inquiries can be processed only if title and company are shown.** 3/31/69

Never mind the fine print.

What do you do when it doesn't work?

Sometimes, even something we make stops working.

Sometimes it's our fault. Sometimes it's your fault. And, sometimes it's nobody's fault. That's why every industry has warranties.

Ultimately, only one thing is important: being able to count on the good name of the manufacturer.

Pullman-Standard's good name has a hundred year history. But this assurance of quality is more than reputation. Nowhere is it more tangible than in our Sales and Service engineers, who often call on you before you have to call on them.

When it comes to quality follow-thru, we put our people where others put promises.

Pullman-Standard
WORLD'S LARGEST RAIL CAR MAKER
200 South Michigan Avenue, Chicago, Illinois 60604

A Division of Pullman Incorporated

E. T. Ahnquist
P-S

C. J. Hurst
P-S

Stan Brown
P-S

Richard A. Heise
Rail-Trailer

E. D. Quan
Pullman

Don W. Pazdur
GATX

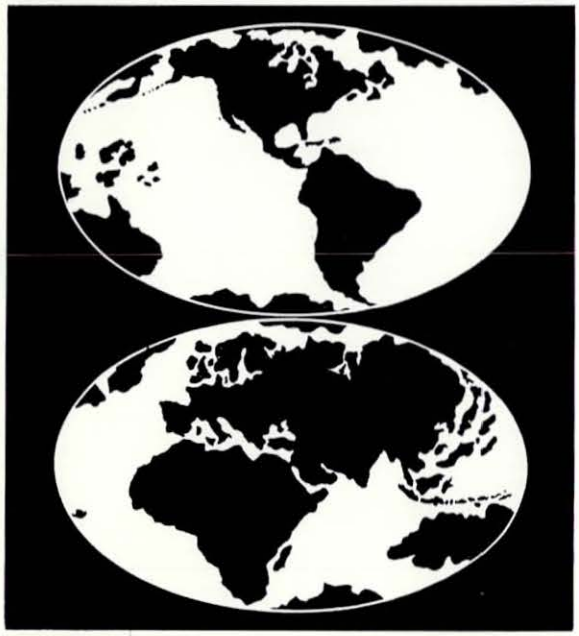
LOWER TOTAL DISTRIBUTION COSTS THROUGH

CONTAINERIZATION

INTEGRATED CONTAINER SERVICE, INC.

offers intermodal container pooling service

TO THE TRANSPORT INDUSTRY



ANYWHERE IN THE WORLD

FOR FURTHER INFORMATION—WRITE—WIRE—TELEX—PHONE

INTEGRATED CONTAINER SERVICE, INC.

230 PARK AVENUE, NEW YORK, NEW YORK 10017

Phone (212) 684-5132 — TELEX 12-6040

CHICAGO: 327 So. La Salle St. Chicago, Ill. 60604 312-939-4611

SAN FRANCISCO: 601 California St. San Francisco, Calif. 94108 415-421-7932

LOS ANGELES: 440 Banning St. Wilmington, Calif. 90744 213-549-1030

Circle 36 on coupon page 69

SUPPLY TRADE

E. T. Ahnquist, vice president, marketing, **Pullman-Standard,** has been appointed vice president and general manager. **C. J. Hurst,** manager, field sales, **Chicago,** succeeds Mr. Ahnquist. **Stan Brown,** assistant vice president, sales, has been named assistant vice president and manager, field sales.

Richard A. Heise, executive vice president and chief operating officer, **The Rail-Trailer Co.,** has been elected president and chief executive officer, succeeding **Eugene F. Ryan,** who will continue as chairman of the board.

E. D. Quan has been appointed vice president, manufacturing, **Pullman Incorporated.** Mr. Quan, who was previously vice president, operations, **Pullman-Standard Division,** will have staff responsibility for all manufacturing in the **Pullman-Standard, Trailmobile** and **Transport Leasing Divisions.**

Don W. Pazdur has been appointed director of advertising and public relations, **General American Transportation Corp.** Mr. Pazdur, who was formerly advertising manager, succeeds **John M. Sheehan,** resigned.

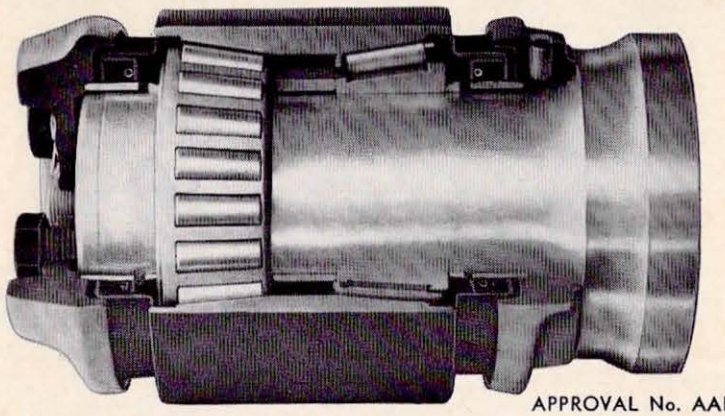
Robert E. Vey, sales engineer, **Wine Railway Appliance,** has been appointed eastern district sales manager, with headquarters remaining in Philadelphia.

Jerome Ziv has been named to the newly created position of manager of scrap and salvage operations, **Industrial Products Group, Evans Products Co.** He was formerly vice president, **M. S. Kaplan Co.**

Harry Popiel, Western Regional technical representative, **Apollo Chemical Corp.,** has been named general sales manager.

Ronald S. Wilson and **Ronald W. Maddocks** will be the principal officers of **Ronsco Supply Co., Ltd.,** Montreal, which has been formed to supply specialty components to the transportation industry. Mr. Maddocks was formerly vice president of the railway division of **IEC-Holden, Ltd.,** and Mr. Wilson was general sales manager of railway equipment products **Hawker-Siddeley Canada, Ltd.**

THIS IS NOT JUST AN AD...
IT'S A FACT!



APPROVAL No. AAR-10

NTN Tapered Journal Roller Bearing for freight cars.

NTN has for over half a century contributed to the progress of railroading. Through constant research, development and manufacturing techniques, **NTN** ranks among the top suppliers of tapered journal bearings in the world-market.
By tradition **NTN** has been noted for its know-how and technical skills.
NTN is the original high standard bearing that is used by railroads in United States, Canada and throughout most of the free world.
NTN stands for longer bearing life and greater reliability. It also keeps a very careful eye on the railroad's budget. THAT'S A FACT!

HERE'S WHAT IT MEANS TO YOU.

1. **500,000 mile guarantee.**
2. **Reduced Weight for easier handling and installation.**
3. **Minimum maintenance.**

NTN

NTN BEARING CORPORATION OF AMERICA
9 Albertson Ave., Albertson, Long Island, N. Y. 11507
7060 Lawndale Ave., Lincolnwood, Ill. 60645
FOR COMPLETE DETAILS — WRITE OR PHONE

Representative in U.S.A. UNITY RAILWAY SUPPLY CO., INC.
332 S. Michigan Ave., Chicago, Ill. 60604
Telephone (312) 939-3438

Representative in Canada CANADIAN BRONZE CO., LTD.
999 De Lorimer Ave.
Montreal 24, Quebec, Canada
Telephone (514) 524-1133

Manufacturer: The Toyo Bearing Mfg. Co., LTD.

Circle 4 on coupon page 69

LUTHER MILLER

AS THE EDITOR SEES IT

205 MILLION LOBBYISTS?—Harry Truman once said that he considered the role of the President of the United States to be that of a lobbyist—a lobbyist for the people, defending the public interest against the special interests that are often so expensively and so ably represented in Washington. Mr. Truman's point seems to us to be an uncommonly good one that is as applicable to the President's chief deputies—his Cabinet officers—as it is to the Chief himself. Transportation Secretary John A. Volpe is one who seems to subscribe to this philosophy. In an interview with The New York Times (see page 84, for further comment), Mr. Volpe firmly rejected the notion that DOT decisions are affected by any organized highway lobby, commenting: "I don't know who the highway lobby could be except the 205 million Americans who want to travel more efficiently than they do today." In other words: the lobby DOT listens to is the people.

WE'LL BUY THAT—If there are, indeed, 205 million lobbyists for the highways, there are at least 205 million lobbyists for the railroads. What is the single most important issue confronting our citizenry today? Not personal mobility (although that must rank high)—but inflation. And what greater anti-inflationary factor has our nation had than the railroads? In the event that Secretary Volpe is not aware of it (as he responds to his 205 million lobbyists), it is worth repeating that while the cost-of-living index was rising *23%* over the past decade, the cost of railroad freight transportation was declining by *8%*. When you consider that railroads account for 42% of all U.S. intercity ton miles—tons of coal, tons of TV sets, tons of lumber, indeed tons of autos—the importance to "the people's lobby" of cheap rail transportation is, to say the least, interesting. It will also be interesting to see how DOT responds to this lobby.

Selecto-Flash is geared to make it really easy and economical for all equipment owners to get numbered quickly! These A.C.I. KARTRAK Sets are completely inspected and checked • fully guaranteed for reliability and uniformity • of approved SCOTCHLITE® reflective materials • also available partially numbered with Carrier Code Index • Sets supplied on full .062"/.040" aluminum, steel or flexible vinyl film.

Call us about our **48 hr. Flash Service . . . TELEFAX: GCW**

CONTAINER AND FLEET MARKING SPECIALISTS

Selecto-Flash is producing modern multi-color markings of corporate designs, trademarks, die-cut letters and numbers for leading world-wide companies. We stock a full line of control and identification numbers. Our Expert Application Teams will set up at any location to perform or demonstrate the correct applying of container markings.

SELECTO-FLASH, Inc., CONTAINER MARKING DIV.
78 Ashland Ave., West Orange, N. J. 07052 • Tel. (201) 677-3500
Boston (617) 265-9181 • Phil. (215) 945-3400 • Balt. (301) 792-8688

Circle 38 on coupon page 69

Study LOCOMOTIVE MECHANICAL EQUIPMENT MAINTENANCE in spare time at home

The man they respect in most shops is the one who's apt to know the answer when a problem arises. You know a man like that; wouldn't you get a lot of satisfaction and personal pride in being like him? Even though it may not show in the pay check, you can't measure such satisfaction in dollars.

You can be such a man by taking this two-year course for mechanical department employees who want to know more about locomotive mechanical equipment maintenance and repair. Two lessons a month, in simple, non-technical language, guide you swiftly to a better working knowledge of the subject. Your lessons are graded by instructors who give individual, personalized advice as needed. The cost is low and payable in monthly installments. For full information, return coupon.

RAILWAY EDUCATIONAL BUREAU
1809 Capitol Ave., Omaha, Neb. 68102

Send full information on locomotive mechanical equipment maintenance home study course.

Name_____

Address_____

City, State, ZIP_____

Railroad_____

Job title_____ R39

(Continued from page 56)

master, Markham Yard. **J. L. Turnland** appointed trainmaster, Louisville, Paducah, Evansville and Uniontown districts, Central City, Ky. Mr. Turnland's successor as trainmaster, St. Louis and Springfield districts, with headquarters at East St. Louis, Ill., is **D. G. Dorgan. C. D. Majors,** trainmaster-traveling engineer, Amboy district, LaSalle, Ill., becomes trainmaster of Lake Cormorant, Tallahatchie, Swan Lake, Tehula, Grenada, Water Valley and Jackson districts and Minter City Branch, Memphis. **M. E. Lingle** succeeds Mr. Majors. **D. I. Gruenwald** named trainmaster, Birmingham and Cairo districts, with headquarters at Jackson, Tenn.

In the intermodal services department, **L. A. Schellenberger,** formerly manager, piggyback sales, traffic department, appointed director piggyback sales; **Maryatt A. Watkins,** who was supervisor-piggyback, named director TOFC-COFC pricing coordination; **William F. Geserick,** previously manager TOFC operations, operating department, named director TOFC-COFC operations, and **Richard H. Wiersema** appointed director service planning and analysis. Mr. Wiersema was manager of new service planning.

Robert H. Paschal named general manager car control, Chicago. Mr. Paschal was formerly manager and chief engineer, **Fort Worth & Denver.**

ILLINOIS TERMINAL.—The following named traffic managers: **D. A. Lewis,** Northern Region, Chicago; **C. H. Dawson,** Southwestern Region, Dallas; **D. P. O'Connor,** Central Region, East Peoria, Ill.; **W. I. Pierce,** Western Region, Portland, Ore.; **W. J. Resetarits,** Midwestern Region, St. Louis; **K. L. Stivers,** Eastern Region, Flushing, N.Y.; **A. S. Taylor,** Southeastern Region, St. Louis. **Don E. Wilson** appointed general freight agent, St. Louis.

Mr. Dawson succeeds **Ralph A. Lovelace,** who has resigned to enter private business.

KANSAS CITY SOUTHERN-LOUISIANA & ARKANSAS.—V. C. Pragman appointed acting treasurer of **Kansas City Southern Industries, Inc.,** and of the two railroads and subsidiaries, with headquarters at Kansas City, Mo., succeeding **F. W. Beatty,** treasurer, who retired Dec. 31, 1968, after more than 50 years' service. **Eric E. Snodgrass,** assistant freight traffic manager-rates, **KCS,** and **John T. Garrigues,** district freight agent, **KCS,** retired Dec. 31 after 46 years and more than 47 years of service, respectively. **J. L. Deveney** named superintendent, **KCS,** Shreveport, La., to replace **G. M. Switzer,** who retired Dec. 31 after more than 48 years of service. **Joe Webb** becomes superintendent, **L&A,** Shreveport, to succeed **R. E. Canty,** who retired Dec. 31 after more than 48 years' service. **B. R. Amis** named trainmaster, Third subdivision, **KCS,** Heavener, Okla., succeeding **A. W. Hall,** transferred to the Sixth and Seventh subdivisions, Shreveport, Mr. Hall replaces **F. A. Grimmett,** who becomes trainmaster, Shreveport, Baton Rouge and New Orleans subdivisions, **L&A,** Shreveport.

L. M. Barnett named division engineer,

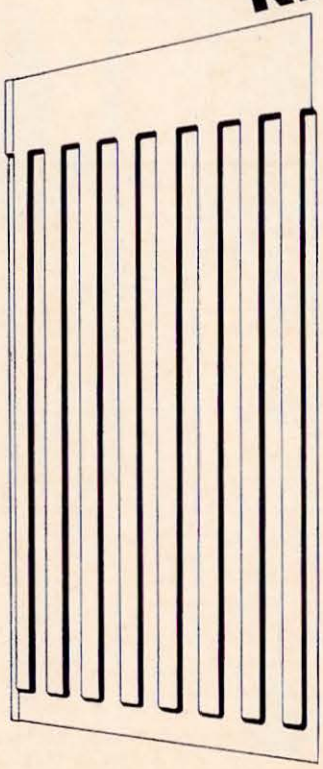
PROTECTING RAILROAD CARGO SINCE 1897

Being oldest is one thing. Being best is something else. Tyden is both – as more than 90% of North America's railroads testify by their exclusive use of the Tyden Seal. Should you be among the few who haven't gotten the word, please write today for free samples and details. We're not too old to move fast.

THE TYDEN SEAL COMPANY
Division of The Viking Corporation ☐ Hastings, Michigan 49058

Circle 40 on coupon page 69

NEW! GLASBORD® RIB PANELS HIGHLY IMPACT & ABRASION RESISTANT



This all new GLASBORD RIB PANEL is a versatile configuration—precision molded to provide maximum panel strength and a superior surface finish. The configuration is the convolute type as shown by the illustration, and features an easy-to-seal lap joint for simplified installation.

The ribs of the GLASBORD PANEL are wide with plenty of load-holding surface. They are properly spaced for adequate air circulation, yet close enough to hold back even small cartons. These wide ribs with well rounded corners prevent damage to hanging meat carcasses, and easily deflect glancing blows from pallets and fork lifts.

Steam cleaning and immediate cooling to subzero temperatures have no adverse effect on GLASBORD RIB PANELS.

A variety of lengths and widths is available.

ASK FOR BULLETIN 69.

kemlite

KEMLITE CORPORATION
Dept. RA
P. O. Box 429, Joliet, Illinois 60434

Circle 39 on coupon page 69

Phil E. Geil
L&N

J. W. Thrasher
M-K-T

KCS, Shreveport, succeeding, **J. W. Thrasher,** resigned to join the Katy.

L. D. Fry, superintendent of communications, **KCS,** retired Dec. 31 after more than 12 years of service. **Roy L. Fitzmeyer** named manager of signals and communications, **KCS-L&A** and subsidiaries, Kansas City.

LEHIGH & HUDSON RIVER.—R. C. Winchester, freight traffic manager, Warwick, N.Y., elected vice president—traffic. **D. G. Bainbridge,** general freight agent, Warwick, appointed eastern traffic manager there, succeeding **M. J. Loydon,** who retired Dec. 31, after 50 years with the L&HR. **William A. Mackintosh,** general agent, New Haven, Conn., appointed district sales manager, New York. **L. H. Leinweber** named general freight agent, rates and divisions. **W. C. Douglas, Jr.,** general western agent, Chicago, appointed western traffic manager there. **Robert E. Farrell,** general agent, Chicago, named district sales manager there. **Robert J. Pierce,** general freight agent, Cleveland, appointed regional sales manager there. **R. E. Cashen,** general agent, Boston, named district sales manager there.

LOUISVILLE & NASHVILLE.—Phil E. Geil, assistant vice president, traffic, elected vice president-traffic administration. **W. L. Walters,** freight traffic agent, Cincinnati, named district freight agent, Milwaukee, Wis. **J. E. Hankins,** freight traffic agent, Kansas City, succeeds Mr. Walters.

MISSOURI-KANSAS-TEXAS. — James W. Thrasher appointed chief engineer, Denison, Tex., succeeding **James T. Hunter,** resigned. Mr. Thrasher was formerly division engineer, **Kansas City Southern,** Shreveport, La.

Ernest R. Brown appointed general attorney, Dallas.

INDUSTRIAL TRAFFIC

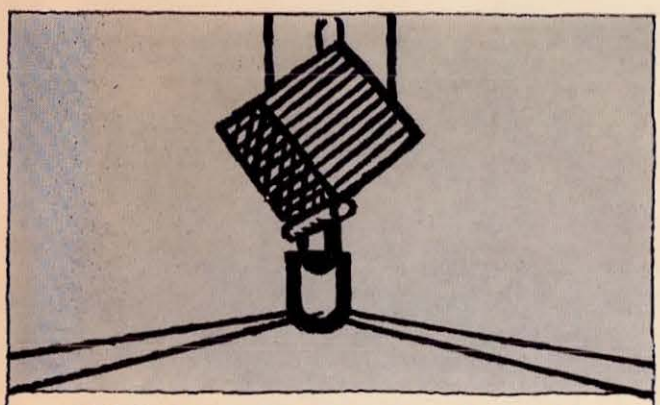
James F. Morse, general traffic manager, **International Paper Co.,** New York, has been named general manager of the new Distribution & Transportation Division, which replaces the Traffic Department. **John J. Archer** named director of distribution and transportation services. Other appointments: **Lawrence A. Renehan,** director of export and marine services; **Donald A. Rogowskey,** director of distribution and transportation planning; **Richard A. Young,** director of distribution and transportation operations; **John P. Grady,** Western transportation services manager; **James J. Farley,** transportation service manager, Northern Division, and **William S. Engelson,** transportation service manager, Southern Kraft Division.

Neal Van Kirk has been appointed director—traffic and transportation, **Wheeling-Pittsburgh Steel Corp.,** Wheeling, W.Va. Mr. Kirk wil supervise: **John G. Squibb,** manager—transportation services; **Frank M. Sullivan,** manager—freight rate development; **Arthur S. Waters,** manager—freight rates; and **W. A. Widmer,** manager—warehousing and distribution. Mr. Van Kirk was formerly director of transportation, Mr. Squibb, manager of transportation services, Mr. Sullivan, manager—freight rates, and Mr. Widmer, manager of distribution and warehousing for Wheeling Steel. Mr. Waters was traffic manager, Pittsburgh Steel, at Pittsburgh.

Richard F. Wager has been appointed assistant traffic manager, **Southwest Oregon Shippers' Traffic Assn.,** at Medford, Ore. Mr. Wager was traffic manager of Harry and David, Medford.

Arthur E. Leitherer, general traffic manager, **Allied Mills, Inc.,** Chicago, has been named vice president—traffic.

Hugo Waninger, vice president—traffic, **Anheuser-Busch, Inc.,** St. Louis, has retired.



NOW GERMANRAIL
MEANS MODERN CONTAINER–TRANSPORTATION

Just name your load! GERMANRAIL has the container-transportation that's perfect for it. Bales, beans or baseballs...all ride safe, secure on GERMANRAIL, throughout Germany and on to all Europe. Numerous dockside facilities as well as inland terminals expedite your shipment. Learn how GERMANRAIL can minimize your handling and loss costs. Let's talk freight soon!

GERMAN FEDERAL RAILROAD
11 WEST 42nd STREET, NEW YORK, N. Y. 10036
JOACHIM WENZEL, GENERAL REPRESENTATIVE

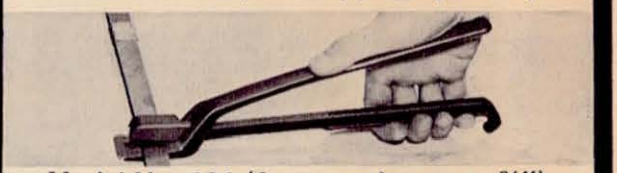
GENERAL AGENCY FOR NORTH AMERICA GFR

Circle 41 on coupon page 69

FREE 10 DAY TRIAL
of this better way to cut steel strapping

NEW SAFETY CUTTERS

Model No. 202 (for strapping up to 2")



Model No. 101 (for strapping up to ¾")

Now you can cut steel strapping FASTER, EASIER and SAFER with either of these two models. Holds both ends while cutting — preventing injury to eyes and skin. Essential tools for every receiving room, warehouse, shop or store.

Model No. 101 (for strapping up to ¾") only **$14.90**
Model No. 202 (for strapping up to 2") only **$39.00**

Either model shipped postpaid on orders of two or more.

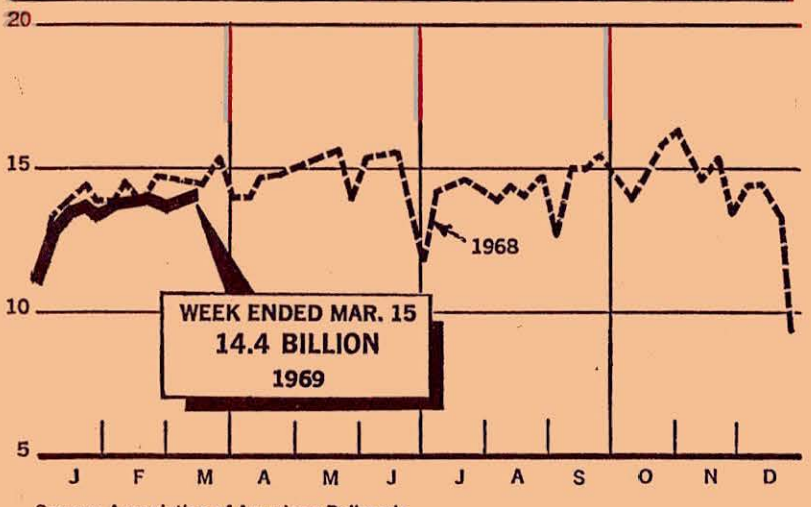
SATISFACTION GUARANTEED. Mail your order today or request free brochure showing quantity discounts.

GOODWAY TOOLS CORPORATION
663R Fifth Ave., New York, N. Y. 10022

Circle 42 on coupon page 69

RAIL FREIGHT TRAFFIC TRENDS

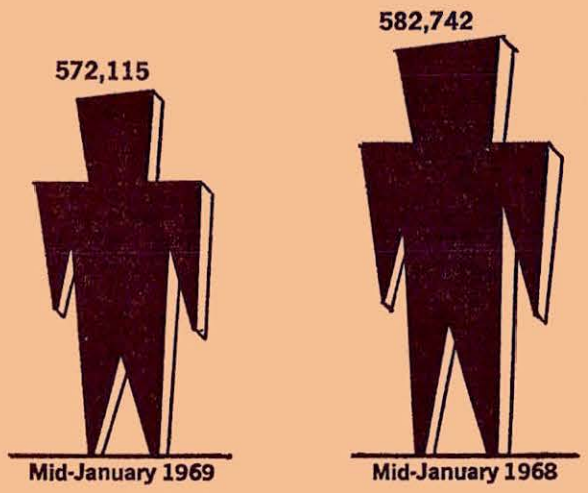
BILLION TON-MILES (Estimated)



Source: Association of American Railroads

RAILROAD EMPLOYMENT

(CLASS I LINE-HAUL RAILROADS)

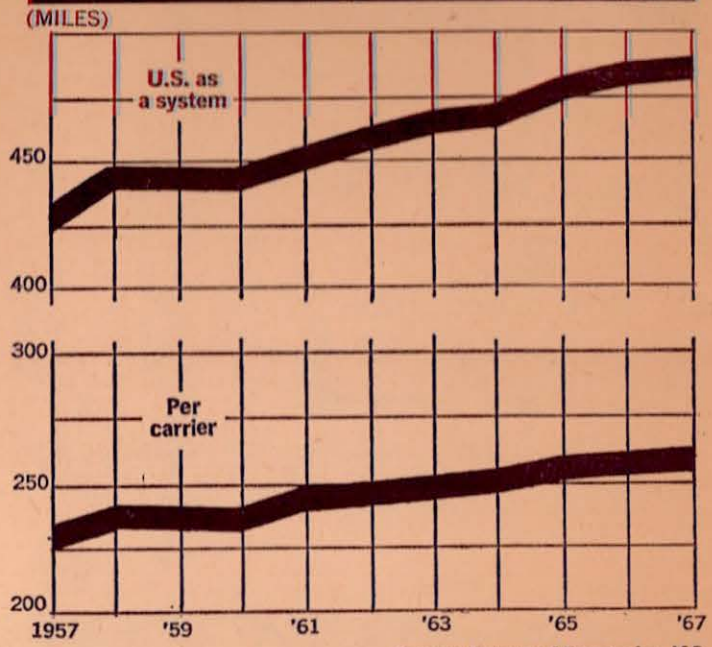


Source: Bureau of Economics, ICC.

Current Statistics

Net income, Class I roads	
Twelve months, 1968	$593,000,000
Twelve months, 1967	$551,000,000
New freight cars on order	
Feb. 1, 1969	34,989
Feb. 1, 1968	24,670
New Freight cars delivered	
1 mo., 1969	4,482
1 mo., 1968	4,717
Serviceable cars	
Feb. 1, 1969	1,379,938
Feb. 1, 1968	1,401,643

AVERAGE RAILROAD HAULS PER TON ALL OPERATING LINE-HAUL RAILROADS



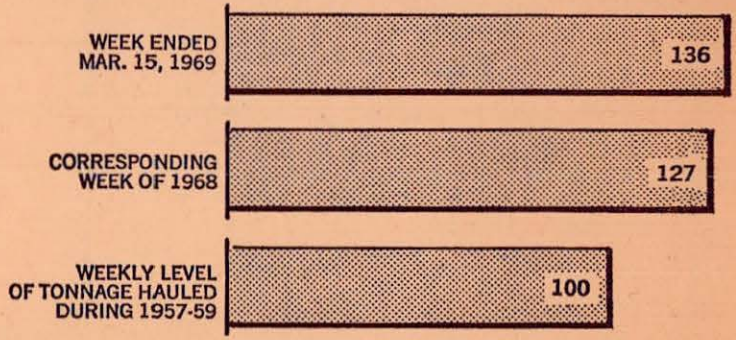
Source: Bureau of Economics, ICC.

SHIPMENTS OF RAILROAD STEEL PRODUCTS

	January 1969	Change from January 1968	
	(net tons)	Per Cent	Net Tons
Rails, trackwork and equipment	88,915	−0.7	−611
Freight and passenger cars and locomotives	215,976	+14.0	+26,474
Street railways and rapid transit systems	4,755	+8.0	+354

Source: American Iron and Steel Institute.

INDEX OF INTERCITY TRUCK TONNAGE



Source: American Trucking Associations.

MARKET OUTLOOK

CARLOADINGS

Loadings of revenue freight in the week ended March 22 totaled 547,050 cars, the Association of American Railroads announced on March 27. This was an increase of 23,840 cars, or 4.6%, compared with the previous week; an increase of 17,419 cars, or 3.3%, compared with the corresponding week last year; and an increase of 17,445 cars, or 3.3%, compared with the equivalent 1967 week. Ton-miles generated by carloadings in the week ended March 22 are estimated at 14.9 billion, an increase of 3.5% above the corresponding week of 1968, and 7.5% above the 1967 week.

REVENUE FREIGHT CARLOADINGS

Commodity	Mar. 15 week	Preceding week	Per cent change
Grain	20,833	20,561	+ 1.3
Farm products	13,319	14,800	—10.0
Metallic ores	21,875	18,872	+15.9
Coal	88,456	70,755	+25.0
Crushed stone, gravel & sand	24,169	24,514	— 1.4
Nonmetallic minerals	10,136	10,009	+ 1.3
Grain mill products	20,569	20,833	— 1.3
Food & kindred products	24,574	25,501	— 3.6
Primary forest products	26,925	24,413	+10.3
Lumber & wood products (except furniture)	16,409	16,061	+ 2.2
Pulp, paper & allied products	24,972	25,103	— 0.5
Chemicals & allied products	33,565	33,624	— 0.2
Petroleum products	12,847	12,212	+ 5.2
Stone, clay & glass products	20,316	20,967	— 3.1
Coke	8,062	7,222	+11.6
Metals & products	30,711	30,824	— 0.4
Motor vehicles & equipment	25,192	25,700	— 2.0
Waste & scrap materials	15,866	15,615	+ 1.6
Forwarder & shipper assn. traffic	7,416	7,981	— 7.1
All other carloads	75,035	72,921	+ 2.9
LCL traffic	1,963	2,040	— 3.8
Total cars loaded	523,210	500,528	+ 4.5

CUMULATIVE TOTAL, 11 WEEKS	1969	1968	1967
	5,519,346	5,565,596	5,695,845

PIGGYBACK CARLOADINGS

U. S. piggyback loadings for the week ended March 15 totaled 27,375 cars, carrying 45,102 trailers, compared with 25,691 cars, carrying 41,542 trailers, in the corresponding 1968 week. Loadings for 1969 up to March 15 totaled 274,096 cars, carrying 449,323 trailers, compared with 263,509 cars, carrying 432,432 trailers, in the corresponding period of 1968.

IN CANADA

Cumulative totals	Revenue Cars Loaded	Total Cars Rec'd from Connections
Feb. 21, 1969	502,180	173,622
Feb. 21, 1968	480,647	169,577

FREIGHT-TRAIN CARS

● *Delaware & Hudson.*—Ordered 200 70-ton, 50½-ft box cars costing $3.2 million from Pullman-Standard for delivery next July. All cars will be equipped with roller bearings, cushion underframes, damage-free fittings and automatic slack adjusters.

● *Great Northern.*—Directors authorized acquisition of 500 50-ft 70-ton box cars.

● *Rock Island.*—Ordered 250 50½-ft, 70-ton box cars from Pullman-Standard at a cost of $4.5 million. Delivery is scheduled to start next June. All cars will have cushion underframes and interior load-restraining devices. Fifty cars will have 10-ft sliding doors; the others, 10½-ft plug doors.

● *February bad order ratio 0.1% below 1968.*—Class I roads on Feb. 1, 1969, owned 1,455,974 freight cars, 23,597 less than on Feb. 1, 1968, according to AAR report summarized below.

	Feb. 1, 1969	Feb. 1, 1968	Change
Car ownership	1,455,974	1,479,571	—23,597
Waiting repair	76,036	77,928	— 1,892
Repair ratio	5.2%	5.3%	— 0.1%

LOCOMOTIVES

● *Great Northern.*—Ordered eight 3,600-hp diesel-electric units from EMD for delivery in July.

HIGHWAY

● *Erie Lackawanna.*—Has acquired 600 additional piggyback trailers to meet increased shipper demand for such equipment.

● *Santa Fe Trail Transportation.*—Ordered 1,263 highway vans, 100 container chassis, 600 refrigeration units and 27 diesel tractors, at a total cost of approximately $13.5 million. The Santa Fe Railway subsidiary will get 300 insulated trailers from Strick; 370 dry vans from Timpte Trailer; 150 insulated trailers and 100 container chassis from Dorsey Trailers; 150 insulated trailers from Highway Trailer Industries; 250 drop-frame dry vans from Lufkin Foundry and Machine; 43 dry vans from Trailmobile; 600 refrigeration units from Thermo King; and 27 diesel tractors from International Harvester.

NEW FACILITIES

● *B.C. Hydro.*—Awarded two contracts totaling more than $4.5 million for construction of about 20 miles of rail line to Roberts Bank Superport, B.C. A $2.7-million contract was awarded to Fownes Construction Co. Ltd., North Vancouver, for a 12.6-mile section; a $1.8-million contract went to Cattermole-Tretheway Ltd., Vancouver, for a 7.6-mile section. The two sections of the new railroad will be linked by a mile-long segment of Great Northern track.

YOU OUGHT TO KNOW

Reward offered for information on derailment

Southern Pacific has posted a $10,000 reward for information leading to the arrest and conviction of the person or persons responsible for derailing a freight train March 19 near Suisun-Fairfield, Calif. Says W. D. Lamprecht, vice president-system operations: "This was a calculated, deliberate effort to wreck a train, with no regard to lives endangered. It was only a matter of luck that the train crew escaped death or injury, and we intend to find whoever was responsible." SP said an investigation showed that "the rails were disconnected, a piece of heavy metal jammed into the open rail joint and the signal system re-wired so that signals stayed green and could not alert the engineer to a break in track." Site of the track-tampering was an uninhabited slough about five miles west of Suisun-Fairfield on SP's main line between Sacramento and the Bay Area. A 40-car westbound freight train, traveling at almost 60 mph, hit the break and derailed at 1:35 a.m., March 19. Two diesel units and 30 cars went off, but the diesels did not overturn and the crew escaped injury. The loss totaled about $500,000, including damage to equipment, track and lading. Most of the cars involved, SP said, were loaded with household appliances.

A 'southeast corridor' for Brazil?

Reports from Rio de Janeiro and Tokyo indicate that Japanese interests are very close to closing a deal for construction of a high-speed rail line between Rio de Janeiro and Sao Paulo. Discussions of the proposal go back almost two years, and the Japanese had a technical/commercial delegation on the spot in Brazil through most of last year. If the plan goes through, a Japanese consortium will build the 270-mile line for speeds of 125 mph, supply the rolling stock and all equipment, and finance it.

Volpe swears in new FRA chief in quick ceremony

It took Transportation Secretary John A. Volpe just five minutes last week to swear Reginald N. Whitman in as Federal Railroad Administrator, hand Whitman his commission, and list Whitman's qualifications as "imagination," "the will to see the need for change," and having learned railroading "from the ground up." An overflow crowd in the DOT auditorium included Congressmen, ICC Chairman Virginia Mae Brown, railroad presidents, labor leaders and supplier representatives. All they got was a suggestion from Volpe that the needs and problems of railroads "will be considered."

Stock exchange offered by SCL holding company

Seaboard Coast Line Industries, Inc., last week announced an offer to exchange its common stock for that of Seaboard Coast Line Railroad Company. The offer is scheduled to expire April 28. Exchange of at least 80% of railroad shares will establish SCL Industries as the publicly-held parent corporation of the railroad. The Virginia-charter holding company was formed by the railroad last August with power to diversify into non-railroad business activities. President W. Thomas Rice said active consideration is now being given to the development of an acquisition program.

GE hikes prices of some locomotives

General Electric's Locomotive Department has announced a 10% increase on its line of mining locomotives, and selective increases of 5% to 11% on industrial locomotives. The increases, which affect both domestic and export orders, became effective Feb. 14. They are attributed to rising costs of labor and materials.

A. E. Stoddard, retired UP president, dies

Arthur E. Stoddard, president of the Union Pacific from 1949 until his retirement in 1964, died on March 24 at Ogden, Utah. Stoddard began his railroad career with Frisco as a shop apprentice in 1915 but joined UP the following year and came up through the ranks of the operating department. He was a veteran of both World War I and World War II.

LEGISLATIVE GOALS: DIVERSIFICATION, PASSENGER AID

(Continued from page 32)

needed to stay free and independent. But railroads simply can't continue to carry the burden of passenger train losses—on services used by less than 1½% of the traveling public—and we don't think we should be expected to do so.

Q. This brings up the whole question of how effectively the railroads are presenting their programs to Congress. Has the AAR taken any steps to strengthen the industry's Congressional liaison procedures?

A. I wouldn't say we have taken any steps to strengthen these procedures. Perhaps we have said, "Let's use what we have a little better than we've used it in the past." This means our own little group of legislative people are getting closer together and are being welded into a team that I think eventually will move mountains. It *can* move mountains. The railroads have men in every state who know the legislative situation, and here in Washington we have railroad representatives who know the situation not only in Washington but in their home territories. Pat Mathews, as vice president of the AAR's legislative department, is charged with bringing these people together and organizing them. I think Pat has done a great job in the last year, and everyone involved has been wonderfully cooperative. Last year we got the grain sampling bill and the co-op bill. They were small victories, maybe, but we did get them. This year we want to go for transportation diversification; we want to go for passenger aid. We want to go for equal treatment in state taxation.

Q. How do you view the potential for greater or more effective support from, first of all, the people who sell to the railroads, and, secondly, from the brotherhoods?

A. The Railway Progress Institute has been most helpful and has pledged support. We cue them in on anything we do. They attend some of our meetings when we have problems of common interest to tackle, and they have helped a great deal. As for the labor organizations, we have a group of railroad presidents who meet periodically with the organization leaders, and one of the subjects on their agenda is legislation.

Q. We continue to hear a lot about the industry's "image." Some say that the railroads have a good story that they haven't told sufficiently well. Others say that they haven't told their story well because it really isn't all that good. What are your views?

A. You must never tell a story that you cannot back up with performance. As we discussed earlier, our performance has slipped, but we're getting back on the track. We will continue to tell our story as we've been telling it. One of the most effective vehicles we've found to tell

. . . This self-propelled auto loading ramp can do the job for you

In serving their customer, Ford Motor Company, at Shreveport, Louisiana, Kansas City Southern Transport Company wanted a fully self-propelled auto loading ramp that could be operated by one man and moved quickly to any point it is needed.

We built this self-propelled loading ramp . . . with the exclusive Page Acme screw lift for an infinite adjustment and simple, one-man control of ramp height. It serves all levels of a standard auto tri-level rail car.

We can build equipment to handle your special rail loading problems, too, no matter what they may be. So when you're looking for hauling equipment for quick moves, give us a call.

PAGE AND PAGE

Division of Walter Kidde & Company, Inc.

Custom Hauling Equipment / *Off-Highway* / *Over-the-Highway* / *On-the-Track • TOFC* / *Rail Car Modification*

1601 N. Columbia Blvd.
Telephone (503) 285-0551
Portland, Oregon 97217

Circle 43 on coupon page 69

this story is the radio, television and magazine advertising campaign we started last fall. Studies indicate that, as a result of this campaign, people are becoming more aware of the importance of the railroad role in the transportation picture—and particularly of the part railroads play in their own lives as citizens and consumers. We're very happy with our program and hope we can continue to build our image in this way.

Q. What you want, then, is a sustained and continuing program of this sort?

A. I hope we can have that.

Q. How much will the AAR spend this year on advertising?

A. So far this year we have $2.5 million authorized. This carries us through June.

Q. Can railroads, in your view, continue to rely on the traditional methods of financing new plant and equipment? Or do they need to strike out in wholly new directions?

A. Our most immediate problem in financing is to get a better rate of return. Without that, we cannot attract the capital we need, whether we use the old traditional methods or whether we find some new way.

Q. As you look ahead, assuming that we're going to continue to have annual increases of 5 to 6% in labor costs—and assuming the GNP will continue to grow at about the same rate and the ton-mile index will continue its slow rise—aren't there going to be even greater financial pressures over the next decade or so?

A. I think we have a real problem ahead of us. Our own prices have got to rise with the inflationary cycle, which is caused partially by the increase in wages and partially by other factors. At the same time we must attract capital if we're going to modernize our plant, and we *must* modernize our plant. If we don't, we will not be able to attract business, nor will we be able to realize the savings that advanced technologies can produce. I can't give you the answer except to suggest that we'll have to price our product very carefully so that we don't price ourselves out of the market. Yet we must get enough for our product to give us a reasonable rate of return. Then we will be able to attract capital for modernization.

Q. We hear more and more talk about the possibility that the railroads may be headed for government ownership. The chairman of the Penn Central has said that if railroads are to avoid nationalization, they must win the right to expand into other modes of transportation, via the common ownership route. . . .

A. I agree that we must get into other forms of transportation. Our nation's growth in the years ahead will demand the ultimate in efficient and economical use of transportation facilities and equipment—and that means intermodal transportation companies offering across-the-board services. Today's complex of competing modes, frequently working at cross purposes, cannot do the job. The railroads don't want to get out of the railroad business; they just want to get into the transportation business. We'll work hard toward that end this year.

Q. Do you detect any warmer climate for a move of this kind in Congress, and at the same time do you detect increasing pressures from the shipping community?

A. I think the pressures for this will probably come from the shippers rather than from the Congress. It's the shipper, after all, who will directly benefit most when the intermodal barriers come down. The consumer also has a stake in this. Some transportation costs are now hidden—making some forms of transport seem cheaper than they are. But somebody pays. One-package transportation service could provide a better deal all around. Railroads aren't permitted to diversify into other transportation businesses—such as air freight and trucking. Such diversification is blocked by law—laws and their administration that belong in the last century. Those laws must be changed to permit development of the kind of common carrier system this nation needs, and I think we'll get recognition of this.

Q. Will a common-ownership bill be introduced in Congress this session?

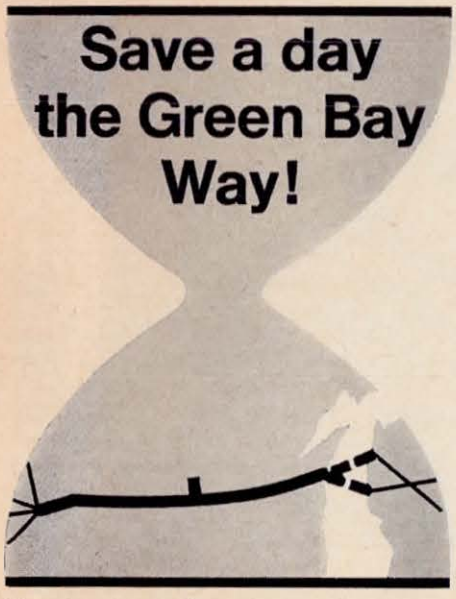
A. That's our plan.

Q. Since you became head of the AAR many changes have been made in your organizational structure. What is the meaning and purpose of these changes?

A. I don't think there have been any very radical changes. We have gone over our organization, particularly here in Washington, with a fine tooth comb to try to make it as efficient as possible. We're doing the same thing in Chicago; we've decided to move some of our people to Washington from Chicago because we think that we will have better control. We've tried to review everything we do to make sure that we're doing what the industry wants us to do—and that we're not doing things and wasting time on matters the industry has no interest in.

Q. Do you feel that the emergence of the railroad conglomerate is essentially a healthy trend?

A. It's very healthy to the point that it seems to be the way—the only way—that some of our companies are able to get profits into their treasuries so that they can attract capital, or use their new earnings for capital. Railroads that want to diversify now must move into nonrelated fields because they are prohibited from diversifying into other modes of transportation. ■



Here's a fast, direct East-West route offering you seven connections. You by-pass congested cities and terminal delays. Frequent, all-weather train ferry movement across Lake Michigan.

GREEN BAY ROUTE

GREEN BAY AND WESTERN RAILROAD

Circle 44 on coupon page 69

Advertisers' Index

ACF Industries, Inc. 18-19
Aluminum Co. of America 22-23
Association of American Railroads 39
Atchison, Topeka & Santa Fe Railway 6
Bartlett Trailer Corp. 51
Berwick Forge & Fabricating Company 55
Canadian Pacific 57
C & EI 68
C & O/B & O Railroad 53
Cardwell Westinghouse Company 49
Dorsey Trailers, Inc. 62
Ex-Cell-O Corporation 25
FreightMaster, A Division of Halliburton Services 4
Fruehauf Division, Fruehauf Corp. 26-27
French National Railroads 65
German Federal Railroad 76
Goodway Tool Corp. 76
Green Bay & Western Railroad Co. 82
Integrated Container Service, Inc. 72
"K" Line New York, Inc. 52
Kansas City Southern Lines 61
Kemlite Corporation 75
Keystone Railway Equipment Company 58-59
Magor Division, Fruehauf Corporation 64
Missouri-Kansas-Texas Railroad Company 24
MLW Worthington Ltd. 3
Molded Fiber Glass Body Co. 67
Nolan Company, The 52
Northern Pacific Railway Company 20-21
NTN Bearing Corp. 73
Page & Page, Inc. 81
PPG Industries ..... IBC
Pullman-Standard 70-71
Pullman, Inc., Trailmobile Division 40-41
Railway Educational Bureau 74
Realco 10
Rock Island Lines 54
Rockwell Mfg. Co., L. F. M. Atchison Div. ..... IFC
Shell Oil Company 28
Select-O-Flash, Inc. 74
Southern Railway System 66
St. Louis-San Francisco Railway Company 13-16
Standard Car Truck Company 9
Sylvania Electric Products, Inc. 46
Thermo King Corporation 60
Tyden Corporation 75
Union Pacific Railroad 63
United States Steel Corp. 44-45
Unity Railway Supply Co. ..... BC

IF YOU ARE MOVING . . .

ATTACH ADDRESS LABEL HERE

We need 5 weeks notice before change of address becomes effective. Attach mailing label here (but in any case give us complete old address) and write new address below. Mail to:

RAILWAY AGE
P.O. Box 961 **Bristol, Conn. 06010**

Name .....
Address .....
City, State, ZIP .....

WANTED: GENERAL FOREMAN
Northwest region railroad has opening for diesel maintenance shop General Foreman. Must be capable of managing a large force and be familiar with E.M.D., Alco and G.E. mechanical and electrical equipment. Liberal benefits. Send resume in confidence to:
Box 241 Railway Age
14 East Jackson Blvd.,
Chicago, Ill. 60604

HAVE A HEART
SUPPORT
YOUR
HEART FUND

CAR FOREMAN — Alexandria, Va. area. Experienced in construction of and repair to freight cars; familiar with AAR interchange rules. Salary open, depending on education and experience. Liberal fringe benefits. Contact Mr. T. B. Choate, Director of Personnel, Richmond, Fredericksburg and Potomac Railroad Co., Richmond, Virginia 23220. An equal opportunity employer.

LOCOMOTIVES FOR SALE OR LEASE
1—44-T G.E. Switcher
1—45-T G.E. Switcher
1—70-T G.E. Switcher
2— 660 H.P. Alco Switchers
2—1000 H.P. Alco Switchers
2—1000 H.P. F-M Switchers
3—2000 H.P. F-M-Switchers
6—2400 H.P. F-M Trainmaster
1—40-T Industrial Brownhoist crane, 60 ft. boom.

Parts for all Locomotives.

Striegel Supply & Equipment Corp.
6001 Chemical Road
Baltimore, Md. 21226

DYNAMIC SALESMAN
IMMEDIATE OPENING for forceful, dedicated salesman in Southeast with progressive, expanding Railroad Contracting Firm. Compensation commensurate with ability, relocation allowance and outstanding fringes. Successful candidate will maintain liaison with railroads and effectively direct sales agents. Experience in all phases of railroad construction and maintenance is required. Send resumé to: Box 28, c/o Railway Age, 30 Church Street, New York, N. Y. 10007.

GIVE TO THE COLLEGE OF YOUR CHOICE

75-TON STEAM RAILROAD WRECKER SNOW PLOW, STEAM
PRICED TO SELL
Dulien Steel, Inc. MA 4-5500
P. O. Box 3566, Seattle Wn. 98124

USABLE SECOND-HAND RAILROAD CAR REPAIR PARTS
IRON & STEEL SCRAP
RAILS & ACCESSORIES
PLANT DISMANTLING
RAILWAY EQUIPMENT LEASING
RAILWAY CAR PARTS & SUPPLIES
RAILWAY CARS

THE PURDY CO.
Executive Office—
2400 W. 95th St.
Chicago, Ill. 60642—329-9320
BRANCH OFFICE & YARDS
MADISON, ILLINOIS
SOUTH SAN FRANCISCO, CALIF.
LONG BEACH, CALIF.

Advertising Sales Department

C. J. Fisher, vice president—sales, Chicago

New York, N. Y. 10007,
30 Church St., (212) 964-3060
W. A. Cubbage—regional sales manager
Charles E. Keil—district manager

Chicago, Ill. 60604,
14 E. Jackson Blvd.
(312) 427-3501
K. F. Sheeran—regional vice president;
John M. Brennan—regional sales manager
Wm. J. Lyneis
Ross Mandic
—district managers

Lakewood, Ohio 44107,
12700 Lake Ave., Apt. 1310
(216) 226-8038
Harry H. Melville—vice president

Pittsburgh, Pa. 15219, Room 720,
(412) 471-7871
Frick Building
Ronald M. Giallonardo—regional sales manager

Dallas, Tex. 75206
Noel Page Building
6400 N. Central Expressway
(214) 361-6972
Joseph Sanders

Los Angeles, Cal. 90017,
1313 West Eighth St.
(213) 483-8414
Fred Klaner, Jr.

San Francisco, Cal. 94133,
515 Pacific Ave.
(415) 421-7004
Lewis A. Vogler & Co.

London S. W. 1, England
01-839 6318
67/68 Jermyn St., St. James's
Max F. Holsinger, Peter Clifton, Alan Berg

Manchester 22, England
Haletop
Wythenshawe Civic Center
Ian Goulden

Paris, 8e, France
70 Rue de Ponthieu
Stephen Brown-Joussard

4 Düsseldorf-Rath
Eitelstrasse 32
Max F. Holsinger,
E. Hillerbrand, Herbert Haibt,
Reinhard Schomburg

Tokyo, Japan
Sun Gain Shia, Ltd.
Shiba Nikkatsu Bldg.
13, Shiba Park
Minato-Ku
C. H. Yiu, Managing Director

VIEWPOINT

Say something, Mr. Volpe—even if it's just 'Hello'

The New York Post was probably unfair to DOT Secretary John A. Volpe when it described him last week as behaving like "a frustrated driver stalled in traffic . . . blasting his horn" at people standing in the way of more urban highways. Noting that the Secretary questions the existence of a highway lobby, The Post inquired testily, "Why then has he given the road lobbyists the right of way?"

In fairness to Mr. Volpe, he is still very new in the job at DOT. He has not yet, perhaps, had the time to expose his thinking on the whole transportation puzzle, and where the various pieces fit into the picture.

Nevertheless, railway men generally, and mass transit advocates in particular, are beginning to fret over the Secretary's apparent infatuation with concrete, on the one hand; and, on the other, his seeming commitment to far-out solutions (e.g., vacuum trains) in those areas where concrete demonstrably is not the answer.

As reported in these pages last week, Mr. Volpe in his first major public statement as DOT chief (at the Pittsburgh Urban Transportation Conference) sounded like anything but a highway man. He underscored his commitment to mass transport. At the same time he avoided any mention of conventional trains as he listed the non-highway options.

A few days later The New York Times published an interview with Secretary Volpe, who, said The Times, "is determined to speed up the pace of constructing inner-city expressways." According to The Times, the Secretary sprang to the defense of the highway builders, declaring that "the highway 'monster' has been created by a minority of instances where dictatorial methods were used."

The Times reported that "Mr. Volpe said he did not expect to submit a comprehensive transit plan to Congress until next year," although "he has noted in the past that the federal government spends over 30 times more on highways than on transit and has pledged his efforts to a 'better balance'."

Nowhere in The Times report were railroads mentioned.

On the following day—Tuesday, March 24—the swearing-in of the new Federal Railroad Administrator, Reginald Whitman, took place. The DOT auditorium was packed for the ceremony. Those who expected Secretary Volpe to say something—at last—about where railroads fit into the picture were disappointed.

"We will consider the needs and problems of the industry," said Secretary Volpe—and that was that. The whole ceremony took five minutes.

WE'RE WAITING, MR. SECRETARY

Does Mr. Volpe's comparative silence on the question of railroads—coupled with his emphasis on new technologies—mean that he thinks railroads really don't matter very much any more? Or does he feel, along with his predecessors at DOT and nearly every transportation economist, that railroads in the future will be called upon for even greater tasks than in the past?

It's time, we respectfully submit, for the Secretary to speak up.

Pittsburgh® Paints offers 3 ways to line covered hopper cars and stationary storage facilities.

If you transport or store dry foods such as flour or sugar, or chemicals like borax or lime, Pittsburgh Paints offers you a choice of three lining systems of exceptional serviceability.

The products included in these systems have been prepared in conformance with existing regulations promulgated under the Food Additives Amendment. They are, therefore, suitable for use as a liner for bulk food materials.

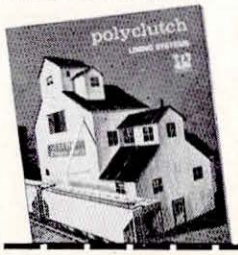
All three are non-toxic, and impart no odor or taste to commodities. They have outstanding flexibility and resistance to abrasion. They are non-porous and chemically inert; easily cleanable with steam or hot water, they provide unusual durability and economy.

The chart below shows the distinctive characteristics of all three systems. For further details, mail the coupon below.

	Original POLYCLUTCH® Liner	Double Cover POLYCLUTCH® Liner	PITHANE® Urethane System
Surfaces for which recommended:	Steel, Aluminium, Concrete	Steel, Aluminium, Concrete	Steel, Aluminium, Wood (clear only)
No. of Coats:	3	1	2
Finish:	Gloss	Low Lustre	High Gloss
Color Choice:	White, Blue	White, Blue	White, Blue, Clear, pastel colors
Application Technique:	Conventional or airless spray, hot or cold	Conventional or airless spray, hot or cold	Conventional or airless spray, hot or cold
Cleaning Method:	Clean with hot water or steam	Clean with hot water or steam	Clean with hot water or steam
A partial list of commodities protected by these systems:	Alfalfa (dehydrate) Alumina Ore Ammonium Nitrate Bauxite Bentonite Bisphenol "A" Borax Boric Acid Brewers Grits Carbon Black Cement Clays (various) Corn Cones Cottonseed Meal Diatomaceous earth Flour Gypsum Calcined Hydraulic Lime Iron ore Malt Mill Feed Milo Para Formaldehyde Powder Phosphate Rock Polyethylene Pellets Polypropylene Pellets Polystyrene Pellets Potash Rice Roofing Granules Sodium Tripoly Phosphate Soybeans Soybeans Meal Starch Sugar (cane & beet) Sulphur Tetra Sodium Pyro Phosphate Vinyl Plastic Resins		

PPG INDUSTRIES

Mail this coupon for POLYCLUTCH Brochure...



Director of Sales, National Accounts, C&R Division
PPG INDUSTRIES, INC., 1 Gateway Center, Pittsburgh, Pa. 15222

Please send me information regarding:

- ☐ POLYCLUTCH Lining Systems
- ☐ Other Railway Maintenance Finishes

Name_____

Company_____

Address_____

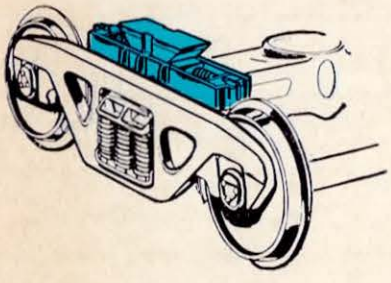
City_____ State_____ Zip_____

Circle 2 on coupon page 69

rail shippers . . . traffic managers . . .

we're pulling for you . . .

To minimize freight damage, insist on NO SWAY equipped cars when you arrange your shipments. Unity has developed a new engineering concept in the control of freight car stability (rocking and swaying).



UNITY'S NO SWAY® SIDE-BEARING STABILIZERS keep cars on the rails and drastically reduce costly derailments. NO SWAY equipped cars have been tested, proven, and are now in continuous service on many railroads.

Protect your commodities—a reduction in losses due to damage means greater profits for you. UNITY is constantly researching new ways to move your goods more efficiently.

Want to know more?
Call or write:

Unity **RAILWAY SUPPLY CO., INC.**

332 S. MICHIGAN AVENUE • PHONE 312-939-3438
CHICAGO, ILLINOIS 60604

Circle 3 on coupon page 69